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OLEO LICENSES IN PENNSYLVANIA.

Food Commissioner Warren of Pennsylvania reports having issued 272 licenses for the sale or use of oleomargarine during 1905, 11 wholesale, 244 retail, 9 restaurant and 8 boarding house licensees. Renovated butter licenses were issued numbering 32, of which 27 were retail and 5 wholesale. The receipts from license fees for the year were \$31,623.26.

WANT OMAHA AND SIOUX CITY TRADE.

It is reported that a syndicate of Western men with money to invest in the packing business are planning to erect a plant at Norfolk, Neb., calculated to draw from both the Omaha and Sioux City trade. It is to be a co-operative concern, each man to continue to "put up" so much a month until the enterprise is on a paying basis. Thus far no actual cash has been put in evidence.

NEW SWIFT STOCK ALL TAKEN.

It was announced from Chicago last week that the entire amount of the additional stock issue authorized at the last annual meeting of Swift & Company had already been subscribed. In fact, it was said that the issue had been considerably over-subscribed. This result, coming at a time when the packing industry is bearing the brunt of a fierce government and "yellow" press attack, is taken to indicate public confidence in the big packing concerns as legitimate business propositions.

CANNERS FAVOR BEST FOOD LAW.

Canned goods packers' associations of the East and West, in convention at Atlantic City this week, evaded endorsement of any particular pure food bill, and adopted resolutions favoring the speedy enactment of a rational federal pure food law, capable of rigid enforcement. The canners cleared their consciences by declaring that "there is probably no other form of food products sold which is so pure and free from adulteration as canned fruits and vegetables," which declaration followed an address by Dr. Wiley in which he referred to various alleged coloring and counterfeit abuses in canning vegetables and fruits. This address and the efforts of advocates of the rival Heyburn and Lannen food bills to secure the endorsement of the convention, gave the sessions a sensational character. Dr. Wiley came in for some warm criticism.

GOVERNMENT ESTIMATE OF HERDS AND FLOCKS

The Bureau of Statistics of the Department of Agriculture this week announced its estimates of the total number of head of livestock on farms in the United States on January 1, 1906, and their valuation. These figures are not the result of a census, but are estimates gathered through the department's staff of crop reporters and from other sources. In view of the serious strictures upon the accuracy of this bureau's estimates in the past, contained in the report recently made by an investigating committee, this year's announcement by the department may not be received with the confidence in its figures that has heretofore greeted it. In the absence of a livestock census known to be reliable, however, these figures must be accepted as the basis of estimate of the flocks and herds of the country.

The report shows an increase in the number of head of every kind of livestock on farms in the United States during 1905, as compared with the previous year's estimates. The figures for cattle show a greater number than for any year in the history of the bureau, with the single exception of 1901. The department estimates the number of head of cattle, including the dairy herds, at 66,861,031, an increase of 5,619,124 head over 1904. Of this increase, the milch cows contributed 2,221,402 head, and "other cattle," which comprises the meat supply, increased 3,397,722 head over 1904.

The number of hogs in the country, reported at 52,102,847, has only been exceeded twice in the history of the government figures. On the other hand, the number of sheep, 50,631,619, has been smaller only once since 1900, this year's estimate being over

13,000,000 smaller than in 1903. Yet it shows an increase of more than 5,000,000 head over the flocks of the previous year.

The total valuation of farm livestock is given as \$3,675,389,442, showing an increase of \$668,808,705 as compared with a year ago. The average price of all animals on farms was \$19.17 per head, or \$1.86 per head more than a year ago. Milch cows made a gain of \$2 per head, while "other cattle," including calves, averaged 70c. higher than a year ago. All kinds of cattle made a gain of \$1.19 per head compared with a year ago. Hogs, including pigs, averaged 17c. higher than a year ago. Sheep and lambs averaged around \$3.54, or 72c. per head higher than a year ago.

Valuation of milch cows gained \$100,516,389 over a year ago, and "other cattle" made \$84,600,401 increase compared with a year ago. Hogs increased nearly 5,000,000 in numbers, but the valuation was only \$38,547,593 greater than a year ago.

The detailed figures on all kinds of livestock are as follows:

	HEAD.		
	1906.	1905.	Increase.
Milch cows	19,793,866	17,572,464	2,221,402
Other cattle	47,067,165	43,669,443	3,397,722
Hogs	52,102,847	47,320,511	4,782,336
Sheep	50,631,619	45,170,423	5,461,196
Horses	18,718,578	17,057,702	1,660,876
Mules	3,405,361	2,888,710	516,651
Totals	191,719,436	173,679,253	18,040,183

	VALUATION.		
	1906.	1905.	Increase.
Milch cows	\$582,788,592	\$482,272,203	\$100,516,389
Other cattle	746,171,709	661,571,306	84,600,401
Hogs	321,802,571	283,254,978	38,547,593
Sheep	179,056,144	127,331,850	51,724,294
Horses	1,510,889,906	1,200,310,020	310,579,886
Mules	334,680,520	251,840,378	82,840,142
Totals	\$3,675,389,442	3,006,580,737	668,808,705

EVIDENCE IN PACKERS' IMMUNITY HEARING

In the hearing of the packers' immunity claim in the federal court at Chicago, this week's sessions were devoted to the introduction of further evidence by the packers' attorneys corroborating the allegation that Commissioner Garfield had practically forced the production of books, papers and other information, and that this information had been used to prosecute the packers. Last week several of the principals testified to the meetings with Mr. Garfield, and his promises in behalf of the President. This week employees have been testifying to the matters furnished to the Garfield agents in the investigation.

The reading of the Garfield report on the

beef industry to the jury occupied several days last week. This report was introduced as the basis for testimony to be presented later proving the charge of collusion between the Department of Commerce and Labor and the Department of Justice. Sessions were resumed on Tuesday with Frank S. Hayward, office manager for Swift & Company, as the first witness. Mr. Hayward told of furnishing secrets of the packing business to agent Durand of the Garfield bureau, and showed a signed agreement between his office and Durand concerning the furnishing of information.

Believing, according to the witness, that

because of this understanding and the supplemental statements by special agent Durand to the effect that the packers were placing themselves within the immunity provision of the law by acceding to his demands, they would not be prosecuted, the Government's agents were permitted to look into every phase of the business. Not only was the government furnished with all data bearing on the general scope of the industry, but private trade secrets were divulged—the industry in its entirety, embracing every detail of practically every department the net profits in every branch of the business, substantially all there was to be known of the packing business, was turned over to the government.

On Wednesday John M. Chaplin, head accountant for Swift & Company, corroborated the previous testimony and told of furnishing books and records to the investigators. W. J. Russell, manager of Swift's wholesale

market department, was the next witness, and enlivened the proceedings with testimony in his characteristically breezy style concerning information he had furnished to agent Carroll, who wanted to know "what was wrong with the meat business."

Edward A. Cudahy, vice president and general manager of the Cudahy Packing Company, testified to having been visited by special agent Robertson, with orders from Commissioner Garfield to produce all the records of the company pertaining to the beef business.

Arthur Meeker, of Armour & Company; Charles W. Armour, of the Armour Packing Company, and others testified to the same effect as the previous witnesses. Evidence is expected to be introduced later showing how the very information secured by Garfield's agents was used in securing indictments before the grand jury last spring.

FALSE IDEAS ABOUT FOOD ADULTERATION

To The National Provisioner:

The paramount issue at present seems to be adulterated food. It is certainly a vital question. The adulteration of food has reached to such an alarming extent that it behoves the nation to enact stringent laws to govern the sale of foodstuffs. While many of the adulterants used in cheaper food are not inimical to health they destroy a percentage of the food value, so that the purchasers are not receiving value for their money or the nutrition that pure food would furnish.

Under these conditions it is certainly not profitable for consumers to purchase food that has been adulterated with some inferior substance to cheapen it, or if any of the food value has been extracted. When the general public realize this, the demand for cheap adulterated articles of food will cease.

Coloring matter in foods should also be condemned, as the artificial coloring of food products does not enhance the food value one iota. It pleases the eye only, and it is often deleterious to the functions of the digestive organs. As long as the consumer, however, desires golden colored butter, bright green peas, string beans and spinach, barber pole candy, etc., the manufacturers will supply the demand. So the question of coloring matter can be adjusted by the consumer without the aid of the law.

Borax as an Ancient Preservative.

The question of preservatives, however, is a serious one. The Dairy and Food Commissioners, political chemists and the press in general condemn modern preservatives only. The older methods, such as salt, sugar, vinegar, smoke, alcohol, etc., are recognized as healthful preservatives. While borax and boric acid are classed among the modern preservatives, they are quite aged, however, as history informs us they were used by Nero during his reign. The press and others also class borax and boric acid with embalming fluids, sulphuric acid, formaldehyde and other poisons.

The medical fraternity class borax with salts as follows: Borax, bi-borate of sodium; salt, chloride of sodium; soda, bicarbonate of sodium. Thus showing borax is a salt and should be classed with the salts, instead of with the corrosive chemicals.

The general public have no idea of the man-

ner in which borax and boric acid are used to preserve food. They surmise that borax and boric acid embalm food. The ignorance of the press is the cause of such false impressions. It was the press that embalmed the meat during the Spanish war. The government appointed Prof. Mendel of Yale as official chemist to analyze the so-called embalmed meat. Prof. Mendel failed to find even a trace of any kind of preservative, and so stated in his official report. The press, nevertheless, stated that the report was whitewashed, and continued to falsely inform the public about the so-called embalmed beef thus creating the false impression that has been imbued by the Dairy and Food Commissioners throughout the country.

Almost every day we read of cases of ptomaine poisoning, caused by eating canned meats, pork, ice cream, etc., that have not been preserved. Ptomaine poisoning or other poisonous germs cannot thrive unless conditions are favorable for their propagation. Under such conditions is it wise to condemn borax and boric acid, the mild preservatives, that would prevent the favorable conditions for the propagation of obnoxious poisonous germs? It is the invisible microbe that sends millions to an untimely grave, and the legislators of our country are endeavoring to make condition more favorable for the breeding places of deadly germs by condemning borax and boric acid as preservatives.

Ignorance of Some Lawmakers.

Our wise Senators, who are considering a pure food bill, are not aware that borax does not penetrate meat. Mr. Lodge of Massachusetts knows the value of boric acid on ham, bacon, fish, etc. Mr. Heyburn of Idaho does not. Mr. Heyburn says, "90 per cent. of the consumers take them as they come from the grocers and cook them."

Mr. McCumber of North Dakota also believes hams are cooked without soaking, unless they may be macerated to take out the excessive amount of saltpetre or salt, but that such process is not used in the ordinary household. I would certainly advise Mr. McCumber and Mr. Heyburn to spend an hour or so in the culinary department of any place where ham is prepared for the table. They would then learn that the outside of the ham is

(Concluded on page 35.)

SENATE VOTE ON FOOD BILL.

Senator Heyburn, whose pure food bill represents the ideas of those who believe in investing the food dictatorship of the country in the Department of Agriculture, has at last succeeded in getting the Senate to agree on a day for a vote on his measure, which has been "unfinished business" in that body for some time. Wednesday, February 21, is set for a vote on the Heyburn bill. Stronger opposition than ever to this measure has arisen since Senator Money introduced his food bill, which is practically the Lannan bill, and which puts food law enforcement in the hands of the Department of Commerce and Labor, and food analysis in the Public Health laboratory. In attacking the Heyburn bill this week, Senator Money said:

"I do not believe in giving the Bureau of Chemistry of the Department of Agriculture the power to hold up the foods of the country and to arbitrarily say that they shall be branded as poisonous and adulterated without any appeal to the courts for redress. The Heyburn bill gives the bureau the right to analyze samples of food, drugs, medicines and liquors, and to say that if it shall appear from such examination that the samples contain deleterious ingredients that the Secretary of Agriculture shall give notice to the parties from whom the samples are taken and to the public that they are adulterated. The courts are not in any way taken into consideration, and the Secretary of Agriculture shall condemn the goods and warn all other persons in whose possession the articles may be found.

"What right has the Bureau of Chemistry to interpret the laws of the land and cause citizens to be punished on that interpretation by public condemnation of their goods by the Secretary of Agriculture? Why is a man not entitled to a trial before a court and jury before his goods are publicly condemned and all people warned that his goods do not comply with the national law? Should he not have an opportunity to defend his name and the reputation of his goods? The proper way to enforce any law is to submit the facts or the evidence whether or not the law has been violated."

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GERMANS WANT NO TARIFF WAR WITH AMERICA

(Special Correspondence of The National Provisioner.)

Hamburg, Feb. 3, 1906.—For weeks we have heard nothing in telegrams and leaders but tariff war with the United States. Generally the writers are satisfied to speak of such a war as unavoidable, without any attempt to fully understand the gravity of the circumstances for Germany. It may be taken as granted that both governments have been agreed for some time that a tariff war must be avoided, and as the peculiar conditions of American legislation prevent any possibility of tariff reduction in the United States before March 1st next, the necessity arises to make mutual concessions of all that can be granted without parliamentary sanction.

This refers to customs regulations existing both in the United States and Germany. The commercial world has felt them to be obnoxious and irritatingly annoying. There is really no reason why invoices from Germany, if properly verified, should not be recognized in America, and there is equally little reason why the German government should not recognize the certificates of examination by American meat inspectors as sufficient proof of sanitary cleanliness, nor is there reason for the further existence of the embargo on live cattle, especially since the new tariff will increase the duty after March 1st by 200 to 300 per cent.

It is believed that by concessions like these Germany may prevent a tariff war, even if against the wishes of a few large landholders. And suppose Mr. von Podbielski would have to be sacrificed by the German government,

would that not be much less burdensome than, for instance, an increase of American tonnage duties by 100 per cent., which would injure the great German shipping interests, to the great delight of our English competitors?

No government official in Germany fully conscious of the great responsibility could consent to a tariff war. I do not doubt that before a great while the German parliament will receive the agreements with the United States for approval, and the protectionists among the manufacturers who formerly helped the Agrarians at the framing of the new tariff will gladly consent to any reasonable arrangement.

PROVISIONAL TARIFF ARRANGEMENT.

Dispatches from Berlin indicate the feeling there that an agreement has been arrived at between the German and American governments which will bridge over the impending tariff crisis, and give a year's leeway in which to formulate legislation or treaty arrangements for a permanent understanding. The basis of the temporary arrangement is said to be the better treatment of German imports to the United States by the customs authorities, particularly in the matter of disagreeable custom house formalities. In return Germany will give American imports the benefit of the "favored nation clause" of the new German tariff during the provisional period. Washington reports are that it may be difficult to amend the customs rules as desired.

ANDERSON FOWLER DIES AT NAPLES.

Anderson Fowler, formerly president of Fowler Bros., Ltd., Liverpool, and the Anglo-American Provision Company, Chicago, died February 9th at Naples, Italy. Mr. Fowler was at one time—in fact up to the time he sold his interests to the National Packing Company—a powerful factor in the provision business, both domestic and export. He was a member of the Chicago Board of Trade, but spent the greater part of his time in New York, the Chicago end of the business being successfully managed by the late Samuel A. McClean, Jr., and Fred Cowin, now general superintendent for the National Packing Company, in whom Mr. Fowler had the utmost confidence.

Mr. Fowler was sixty-four years old and the last of six brothers, all of whom died comparatively young and suddenly in most cases. He was apparently one of the most robust of men and was in good health all his life, which has been a most active one. He was the father of fourteen children, of whom six sons and four daughters are still living. Mr. Fowler had not been in active business since he sold out his packing interests. He had been interested in many other enterprises and was a leading exporter of grain and flour under the name of Anderson Fowler & Co., and did a large commission business in these staples with Europe. He was a prominent member of the Methodist Church and married the daughter of the Rev. Dr. Arthur, of London, Eng. Their home has been in New York since he came to this country, about 1865, from Liverpool, though his native place was Ireland, from which the whole family came.

CANADA'S HOG DILEMMA.

The chief topic of discussion in Canada just now continues to be the question of the hog shortage and the embargo on American hogs. Packers and hog raisers are engaged in an animated controversy. The packers claim that since the placing of the embargo on American hogs there has been a shortage which the farmers have not helped to relieve, many of them, on the contrary, having demanded increased prices, while the farmers, on the other hand, contend that the packers are not paying fair prices.

The views of the packers are at the moment of considerable interest. They state that they have not seen such high prices for years as are now being paid for live hogs, which last week sold at Montreal as high as \$7.60 per cwt. However, investigations by the live stock branch of the Canadian agricultural department into the alleged shortage of hogs have shown that for some time past the supply of bacon hogs in Canada has been falling off. Even before the order was issued debarring packers from importing American hogs to be slaughtered in bond, difficulty was experienced by Canadian packers in procuring sufficient hogs. Hog raisers claim, according to the Chicago Drovers' Journal, that the production is considerably nearer the normal than would appear from the statements of the packers.

Inquiries as to the cause of the shortage brought from packers and producers a variety of replies. The packers say that for the past three years or more the competition between buyers of hogs has been so keen that top prices have been paid continuously and

that prices have been high enough to give a profit to the producer. Speaking from the standpoint of the producer, well-informed authorities claim that the price has not been so uniformly high as it should have been. Again it is argued that the majority of packers have not encouraged the production of hogs of the bacon type and weight. A flat rate has been paid for good and bad alike. The hogs fit only to compete with the low price of the American stock brought quite as much as the sort that competes with Irish and Danish bacon for the highest place on the British market.

It is said that whatever may be the extent of the shortage or the real cause of it the fact remains that unless producers and packers grapple in sympathetic co-operation with the present situation Canada's valuable bacon industry, which has cost years of strenuous effort to build up, may become seriously demoralized. In 1890 there were only two packing houses in the export trade having a weekly capacity of some 3,000 hogs, while last year the weekly capacity of the sixteen packinghouses in operation was about 50,000. According to the season the output from Canada has reached about \$15,000,000 annually, or 20 per cent. of the total quantity of bacon imported by Great Britain.

BOLL WEEVIL STILL ADVANCING.

Boll weevil experts of the Department of Agriculture declare that the advance of that pest was unchecked during the past year, and that the problem is as far as ever from solution. On his departure from Washington for Texas to resume his work, Dr. W. D. Hunter, who has been in charge of the work for the department, said:

"Our latest reports show that the weevil this year has made his customary advance of fifty miles eastward. The unfavorable part of the present situation is that the late advance puts the pest in the lowlands along the Mississippi River, where conditions are most favorable to its existence. In Texas the low, wet sections suffered most. In western Louisiana there was a belt in which no cotton was grown—a great timber belt. We endeavored to keep the boll weevil from getting past this belt, but have failed. The Mississippi River cannot be regarded as a barrier, as the weevils have been known to fly 25 miles with a favorable wind, and as there is much traffic on the stream it is sure to be carried in baggage. Along the Mississippi River is where the greatest damage will be done. All the Southern States will be affected unless some new remedy is discovered."

IOWA MEAT PRODUCERS ELECT.

The Iowa Corn Belt Meat Producers Association at its annual convention last week at Des Moines, Ia., endorsed movements for the betterment of foreign markets for American meat products, more money for the bureau of animal industry, reform in railroad rates, and other measures, and elected the following officers for the ensuing year: President, A. L. Ames, Buckingham; vice-president, Charles W. Maher, Fort Dodge; secretary, H. C. Wallace, of Des Moines; treasurer, Charles Goodnow, Wall Lake.

MEAT TRADE OF FOREIGN NATIONS

Pre-eminence of the United States as a Provider of Meats and Meat Products to Foreign Countries—This Standing Threatened, However, Unless a Tariff Boycott by These Same Customers Is Avoided—Review of Europe's Meat Imports.

In its issue of January 20 The National Provisioner presented a review of the American export trade in meats and meat products, with a synopsis of tariff conditions in various countries which were the principal meat customers of the United States. The Bureau of Statistics of the United States Department of Agriculture will in a short time issue bulletins, prepared by George K. Holmes, chief of the Division of Foreign Markets, reviewing the international trade in meat animals and packinghouse products from the side of the importing nations, showing what proportion of their supplies these countries get from the United States. The figures for thirteen European countries and Cuba for the last ten years will be included in that review.

The imports of live meat animals from the United States in 1904 into twelve important countries amount to \$37,000,000, or 34 per cent. of the total imports of such animals into these countries. The value of the packinghouse products imported from the United States was \$151,000,000, or 45 per cent. of the total. Of these twelve countries, only the United Kingdom, Belgium, and Cuba imported meat animals from the United States.

Of its total imports of packinghouse products in 1904, Cuba received from the United States 67 per cent., Germany received 58 per cent., the Netherlands 57; Belgium, 51, United Kingdom, 42, Austro-Hungary 36, Italy 31, Norway 23, Switzerland 17, Spain 12, and Russia 5 per cent., and Sweden none.

Great Britain's Imports Are Heaviest.

The United Kingdom imports more meat animals and packinghouse products than all the other countries of Europe combined. The value of these articles imported into the United Kingdom during 1904 was \$283,000,000, while Germany imported only \$83,000,000 worth, the Netherlands \$29,000,000, France \$20,000,000, and each of the other countries on the Continent imported still smaller amounts. The average annual value of these imports into the United Kingdom for the three years 1902-1904 (\$288,000,000) was an increase of \$71,000,000 over the average imports for 1895-1897.

Nearly all the live meat animals imported into that country come from the United States and Canada. Of the fresh beef, the United States supplied 76 per cent., Argentina 2 per cent., and other countries 22 per cent. in 1895-1897; while during 1902-1904, 55 per cent. came from the United States, 39 per cent. from Argentina, and 6 per cent. from other countries. Substantially all the fresh mutton imported comes from New Zealand, Argentina, and Australia. More than 400,000,000 pounds of this meat were imported in 1903 and almost as much in 1904.

Of the 205,000,000 pounds of lard imported in 1904, 187,000,000 came directly from the United States. Oleomargarine, evidently made from the United States oleo oil, comes to the United Kingdom directly from the Netherlands. The latter country supplied 104,000,000 pounds of oleomargarine out of a total of 108,000,000 pounds imported in 1904, while the

imports from the United States were less than 30,000 pounds.

German Imports of Fat and Oils.

Next to the United Kingdom, Germany is the greatest importer of meats and meat products, and, with the growth of German population and manufacturing industries, the imports of these articles have been rapidly growing, notwithstanding the many legal restrictions put in the way. The average annual value of these imports during 1895-1897 was \$56,000,000, and during 1902-1904, \$90,000,000, an increase of about 60 per cent. Nearly all the cattle imported came from Austria-Hungary, Denmark and Switzerland, and nearly all the swine from Russia.

Of the \$43,000,000 worth of packinghouse products imported in 1904, \$19,000,000 was due to lard, \$8,000,000 to tallow, oleomargarine, and oleo oil, \$7,000,000 to sausage casings, and all meats together were valued at \$6,000,000. The United States in 1902-1904 supplied 97 per cent. of the lard imported into Germany, 88 per cent. of the oleomargarine and oleo oil, more than one-third of the sausage casings, and less than one-sixth of the meats.

The total imports of meat animals and packinghouse products into France have declined by more than one-half during the last ten years, the total value in 1904 being equal to only 49.6 per cent. of the total value in 1905. The greatest decreases took place in 1896 and 1904 and were both due to legislative causes. In 1896 a number of regulations were passed introducing stricter sanitary examination, limiting the number of ports of entry for live meat animals, and introducing a special sanitary duty, while in 1903 the tariff on meat animals as well as most packinghouse products was almost doubled.

French Imports Enormously Decreased.

The value of meats imported fell off 70 per cent. during the ten years ending with 1904, the imports of lard decreased 82 per cent., and oleomargarine—because its importation under the name of butter was prohibited—fell off 96 per cent., while the imports of packinghouse products not used for food increased 18.7 per cent. Salted pork and tallow are the only packinghouse products the imports of which still exceed \$1,000,000.

Most of the live animals imported into France come from Algeria, which, as a French colony, has a preferential tariff rate. In 1904, 57 per cent. of all the cattle and 88 per cent. of all the sheep came from that colony. No live animals or fresh meats from the United States are admitted into France. Tallow, lard, fats, salt pork, hams, and sausage are the main packinghouse products received by France from this country.

A large share of the packinghouse products imported into the Netherlands is re-exported, either in the same form or changed by manufacture. In 1904 the imports of oleo oil were 108,000,000 pounds and the exports 59,000,000 pounds; in addition to this, 103,000,000 pounds of oleomargarine were exported. Most of the oleo oil was sent to Germany and over 90 per cent. of the oleomargarine to the United Kingdom.

The final destination of these articles is of interest to the American packer, since nearly 95 per cent. of the oleo oil imported into the Netherlands comes from the United States. The same is true of lard and tallow. As against 76,000,000 pounds of lard imported in 1904, of which 94 per cent. came from the United States, there was an export of 56,000,000 pounds, all but 2,000,000 of which went to Germany; and, as against 98,000,000 pounds of tallow imported, more than one-half of which came from the United Kingdom, 78,000,000 pounds were exported.

Trade Restricted in Belgium.

The imports of live meat animals and packinghouse products into Belgium increased from an annual average of \$14,445,000 during 1895-1897 to \$16,487,000 during 1902-1904, or 14.1 per cent. This small increase for an entire decade is partly due to legislative measures, as the introduction of a duty of about 1.7 cents on a pound of oleomargarine and the sanitary inspection of fresh meat in 1895. As a result, a marked decrease of \$3,000,000 in the imports of packinghouse products occurred from 1895 to 1896. From 1896 to 1904 there was an increase of \$2,000,000.

The United States is the chief country from which packinghouse products are imported, more than 40 per cent. having come from this country in 1902-1904, while the Netherlands, the United Kingdom and France together contributed 32 per cent. During the same three years the United States supplied 90 per cent. of the lard imported into Belgium and 77 per cent. of the cured meats. Of the imports of oleo oil, 60 per cent. came directly from the Netherlands.

For a country with a population of only about three and one-half millions, Switzerland imports a very large quantity of live meat animals and packinghouse products. The total yearly value of these articles during 1902-1904 averaged \$15,223,000, by far the greater part of which was due to live animals and fresh or simply prepared meats. More than 93 per cent. of these imported articles are brought from neighboring countries and 4 per cent. from the United States. It is probable that this large importation is explained by the great number of foreigners who spend the summer in Switzerland. The actual number of tourists visiting that country in 1901 is officially estimated at 300,000 or 400,000.

Austria a Market for Hungary.

The union of industrial Austria with agricultural Hungary provides the former with a good supply of farm products and the latter with a market for the same. Under these circumstances, the import of live meat animals and packinghouse products into these combined countries is not very great, their value in 1904 being \$13,000,000. Owing to a treaty, partly suspended in January, 1906, granting lower tariff rates on imports from Servia than from other countries, that country has been aided in supplying Austria-Hungary with 93 per cent. of its imports of meat animals and more than 10 per cent. of the packinghouse products. The imports of these products amount to less than \$4,000,000 a year, more than one-half of which consists of lard and sausage casings.

Almost all the lard comes from the United States, the fresh meat from Servia, and sausage casings from Germany, Russia, United States and Roumania.

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TRADE GLEANINGS

The Seton Leather Company, of Newark, N. J., has been incorporated with \$100,000 capital stock by J. Kaltenbacher, P. J. Murray and J. V. Clark, all of Newark.

The Farmers' Oil and Fertilizer Company contemplate the establishment of a cottonseed oil refinery at Dawson, Ga. The present capital of \$35,000 will be doubled if the installation is decided on.

The Georgia division of the Farmers' Union contemplate the erection of a fertilizer plant at Atlanta, Ga. C. S. Barrett, of Upson, Ga., is state president.

The Hanson Manufacturing Company, of Zion City, Ill., has been incorporated with \$10,000 capital stock, to manufacture soaps and chemicals, by Charles A. Hanson, Alexander Granger and Gus D. Thomas.

The Mystic Process Company has been organized at Kittery, Me., for the purpose of manufacturing and dealing in leather, hides and skins of all kinds, with \$52,000 capital stock, nothing paid in. Harold P. Knowlton, Malden, Mass., is president, and Jesse E. Forsyth, of Kittery, is treasurer.

Fire destroyed the plant of the Blix Poultry and Egg Company at Waterloo, Ia., causing a loss of \$20,000, with insurance of \$16,000.

The Taylor Cotton and Leather Company, of Lyons, N. Y., has been incorporated with \$150,000, to manufacture leather, by William Taylor, Lyons, and Myron C. Taylor and Willard U. Taylor, of 63 Wall street, New York.

The Wheat Pearl Company, of Portland, Me., has been incorporated with \$800,000 capital stock, of which nothing is paid in, to deal in all kinds of animals and substances suitable for food, fodder and fertilizers. E. Winthrop Freeman is president and treasurer.

Charles E. Kimball, of Summit, N. J., has been appointed receiver for the Franco-American Gelatine Company, for the purpose, it is said, of reorganizing the company.

The Ogden Packing and Provision Company has been incorporated at Ogden, Utah, with a capital stock of \$250,000, of which \$75,000 has been subscribed. F. E. Schlageter, president; Lars Hansen, vice-president; Simon S. Jensen, secretary, and James Pingree, treasurer, with Louis Bitton, Charles Ziemer, W. C. Hunter and M. S. Browning are the incorporators.

Joe Toomey, of Deer Lodge; John Gerdts, of Garrison; Senator Conrad Kohrs, Charles Neck, John Bielenberg, Frank Conley, Tom McTague, of Deer Lodge, and Henry Maher, of Race Track, Mont., are interested in the organization of a company to be capitalized at \$1,000,000, to build a slaughter and packing establishment near Butte, Mont.

The Cudahy Packing Company opened its new branch last week, at Fourteenth and Jones streets, Omaha, Neb. The structure cost in the neighborhood of \$50,000 and is the most modern in branch house equipments.

Work has commenced on the new smokehouse at the Dold Packing Company's plant, Wichita, Kan. The old smokehouse is to be remodeled and increased one story in height. The improvements will cost about \$20,000.

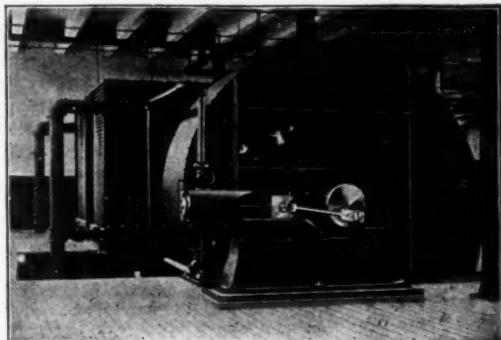
The Kansas City Stock Yards Company, by a vote of the stockholders, has added \$750,000 to its capital stock, making the total now \$9,000,000. A number of improvements to the yards are to be made.

The Montgomery Oil and Fertilizer Company has been incorporated at Montgomery, Ala., with \$50,000 capital, to erect a cottonseed oil mill and fertilizer factory. W. F. Vandiver, J. W. Huger, F. F. Johnston and associates are the incorporators.

J. J. Patton, W. P. Stevens and others have incorporated the Shaw Cotton Oil Company, Shaw, Miss., with a capital stock of \$85,000.

W. La Croix is organizing a company with \$100,000 capital stock, to establish an abattoir at Memphis, Tenn., to be equipped for a daily capacity of 100 cattle and 200 hogs. It is proposed to erect a two-story brick plant to cost, including grounds, between \$75,000 and \$80,000.

THE QUALITY



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550

The Seymour Cotton Oil Company, of Seymour, Tex., has been incorporated with \$50,000 capital stock, by O. W. Love, J. S. Shultz, W. A. Bennett, M. Davis and associates.

The American Tannery Company of Welch, W. Va., has been incorporated with \$5,000 capital stock by Edgar P. Rucker, Luther C. Anderson, D. J. F. Strother and others.

J. D. Ray, Dallas, Tex., and J. F. Roberts, of Mangum, Okla., it is reported, will establish a \$40,000 cottonseed oil mill at Sayre, Okla.

LATE REFRIGERATION NOTES.

Marion, Ky.—John W. Wilson, proprietor of the Wilson Steam Laundry, is considering the installation of an ice plant with a capacity of 8 to 10 tons.

Asheville, N. C.—The Carolina Coal and Ice Company is completing arrangements for the erection of its proposed cold-storage plant.

Galveston, Tex.—The Galveston Brewing Company will expend between \$40,000 and \$50,000 in improvements and additions to its plant.

Farmville, Va.—J. R. Martin and associates will erect 6-ton ice plant. Bids are wanted.

Morganton, N. C.—Dr. I. M. Taylor wants prices on small ice plant for sanitarium.

Richmond, Va.—It is reported that W. S. Forbes has purchased a site on which to erect an ice and cold storage plant.

Cherokee, I. T.—The Cherokee Electric and Manufacturing Company, recently incorporated, will erect and operate an electric light plant and a 10-ton ice plant. About \$10,000 is to be invested.

Gilmore, Ill.—The Gilmore Creamery Company has been incorporated with \$2,500 capital stock, to manufacture butter, by Gustav E. Voelker, E. H. Millington and H. M. Schoen.

DENVER LIVESTOCK REPORT.

Following is the official report of the live stock movement at Denver for the month of January, 1906, with comparisons for the same month of the previous year:

Receipts.

January, 1906.....	Cattle.	Hogs.	Sheep.
27,888	16,963	72,422	
January, 1905.....	19,275	23,407	46,348

Shipments.

January, 1906.....	18,397	413	54,902
January, 1905.....	13,730	919	41,238

Consumed at Denver.

January, 1906.....	5,626	16,655	6,605
January, 1905.....	4,003	22,488	5,112

PROPOSAL.

OFFICE PURCHASING COMMISSARY, U. S. Army, 39 Whitehall street, New York City, N. Y., February 10, 1906.—Sealed proposal for furnishing and delivering subsistence stores in this city for the month of March, 1906, will be received at this office until 11 o'clock A. M., on February 20, 1906, and then opened. Information furnished on application. Envelopes containing bids should be marked "Proposals for Subsistence Stores, opened February 20, 1906," addressed to Lieut.-Col. D. L. BRAINARD, D. C. G., U. S. A. F. 10, 17.

AMERICAN CAN COMPANY REPORT.

The American Can Company has submitted the following financial report for the nine months ending December 31, 1905, the fiscal year having been changed to begin on January 1, instead of April 1, as heretofore:

	Dec. 31,	March 31,
Assets.	1905.	1905.
Plants, etc.	\$74,854,299	\$75,018,966
Imps. & const.	3,376,043	2,858,212
Other inv.	649,209	381,275
Cash	3,311,519	1,440,627
Bills & accts. rec.	1,273,957	1,207,835
Merchandise invent.	4,285,389	6,268,877
 Totals	 \$87,750,506	 \$87,175,792
Liabilities.		
Pfd. stock	\$41,233,300	\$41,233,300
Com. stock	41,233,300	41,233,300
Mtg. assumed		
Accts. payable	721,478	911,932
Dividends	515,416	515,416
Surplus	4,047,012	3,281,844
 Totals	 \$87,750,506	 \$87,175,792

The company's earnings for the nine months were \$2,524,136, and with deductions for depreciation the net profits were \$2,311,417, as against \$2,896,917 for the full twelve months ending March 31, 1905. Since last April \$565,881 has been expended in extension of plants and for sites at New York, Lubec, Me.; Savannah, Ga.; New Orleans and Chicago.

THE PACKERS AND THE CATTLEMEN

By J. Ogden Armour.*

(Concluded from last week.)

There is no cleaner competition anywhere than among the cattle buyers on the livestock market. This competition, together with the marketing methods followed, automatically regulates the market, keeps it an open market and prevents control of it by any "combine." To make this clear let us look into the ways this selling and buying of cattle is carried on. The buyers in the market at the Union Stock Yards of Chicago—leaving out buyers of feeder cattle—may be classed as buyers for the large packinghouses; buyers for the smaller packers and slaughterers; buyers for shipment to the seaboard and to the Old World; buyers for speculators. These different classes of buyers have nothing in common. They are always at war, commercially speaking.

The packers are always in the market for cattle. They have large plants, which if allowed to lie idle do so at great loss. As long as they pay the top price—always with an eye to the selling market for the product on the other side of the slaughter house—they get their choice of the cattle. But if buyers for the large packers should combine to depress prices, what would happen? The moment prices went to a point that promised a little extra profit on the slaughtered product, the buyer for small packers, for shipment and for speculation, would sweep the market, and back prices would go over the heads of a badly rattled "combine."

There may be an impression that the buying capacity of all except representatives of the large packers is too limited to have much effect on the market. The best answer to that lies in the official figures. In 1904, the receipts of cattle at the Chicago Union Stock Yards were 3,259,185 head; of these, 1,326,332 head were reshipped—to feeders, the seaboard packers, to Buffalo, Cleveland, Cincinnati, Pittsburgh, Indianapolis, other cities and to Europe. During the past year, 1905, receipts were 3,411,029 and the shipments were 1,405,708. Thus more than 40 per cent. of the cattle received were bought for shipment.

It is important to remember in this connection the fact that there is not a slaughtering establishment in this country that is regularly run at its full capacity. See what this means so far as the control of the cattle market by any "combine" is concerned. The instant cattle prices became depressed so that there was an attractive margin the smaller packers and killers would jump in, get the cattle and kill extensively. There are hundreds of these smaller houses which make a business of waiting upon the turns of the market for the hour of opportunity, killing at certain times two, three and four times as many cattle as they do when prices rule above a certain low point.

If the packers could regulate the cattle market they would prefer to have a steady market with an even inflow of cattle—about the same number each day. Their profits depend upon the rapid turning of the money invested, upon shortening as much as possible the period between the moment when steers arrive and the time when their beef is sold. When their plants lie idle they lose. Every

manufacturer's aim is to keep his plant in even and continuous operation.

"Price Combine" Theory Exploded.

Right here it should be remembered that the large packer must have every day a certain amount of high-grade cattle. The only way he can get this is to go into the market when it opens. If he were to hang back he would get left on this imperative material; he would get only the "tail ends." His only protection in this particular is to buy early. The sort of buying methods attributed to "trust buyers" would leave him in the lurch on this score.

An important chapter in any comprehensive history of the development of the cattle business would be the chapter on cattle loan companies. These companies assisted to develop and stimulate and make a business of cattle raising in a measure difficult to overestimate. Among the first one of these was the Omaha Cattle Loan Company, organized nine years ago by Thomas B. McPherson. The packers backed it with their money and credit as they backed others at Omaha, Kansas City, St. Joseph and Chicago—for selfish reasons, of course. These loan companies, managed by men who knew cattle, make a specialty of loaning money on cattle and thus put life into the industry. Before their time cattle raising on a large scale was practically closed to the man of small capital. The local banks, where there were banks, were too weak to take the risk; but with the cattle loan companies in business the capable cattlemen were able to go into the business on a large scale. These companies helped develop the growing of higher grade stock. An idea of the importance of this feature may be gathered from the fact that the Omaha concern loaned \$10,000,000 annually almost entirely on ranch and feeder cattle.

True, these companies are all out of business now—put out by two causes. Enforcement of the no-fence law by the United States government has made loaning on large herds extra hazardous. Then the prosperity of the West, to which the cattle business, stimulated by the cattle loan companies, has contributed no small share, has filled the local banks with money and has enabled the local banker to loan the money on cattle that used to come from these loan companies.

Now consider recent low prices. Natural causes have continued to hold cattle prices down with the break of 1903. Chief among these causes has been the breaking up of the big Western and Northwestern range herds consequent upon enforcement of the no-fence law by the United States government.

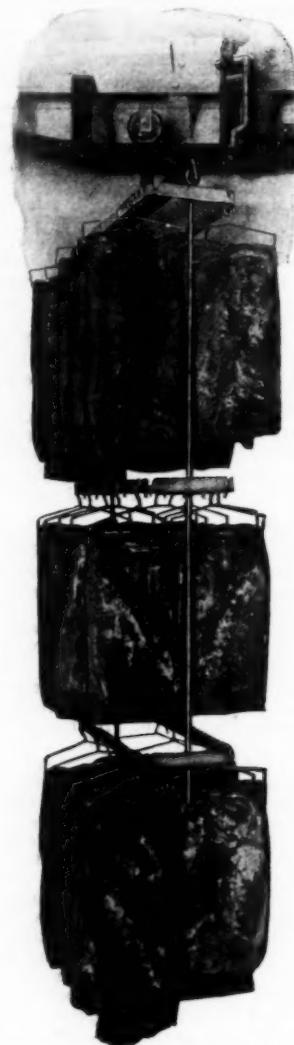
Market Deluged with Range Cattle.

Since the buffalo gave way to the steer on the Western plains in the last seventies, a considerable proportion of the beef cattle supply has come from the Western ranges. As the packing industry developed and, by making an assured market, converted range cattle raising from an adventure into a settled business, the cattlemen learned that it was better to fence the ranges than to herd the cattle on the open plains. All around him in Montana, Western Nebraska, Wyoming, Colorado, Idaho and the Dakotas were millions of acres of grass land fit for nothing but cattle grazing and fit for that only where water could be had. By acquiring ownership of a small tract surrounding or adjacent to a water supply he could practically control thousands or millions of acres surrounding him. If it was public land he used it for nothing. If it was Indian Reservation land he rented it for a cent or a fraction of a cent an acre a year. With a barbed wire fence he could inclose what he needed and go into the cattle business on a large scale.

A few years ago the United States government

(Continued on page 26.)

Smoke House Cages



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Big saving in time, labor and space. Quickness in filling and emptying houses. Increasing capacity and decreasing shrinkage. More open distribution of the pieces, allowing better circulation for smoke and heat. Meats will smoke out in one-half the time of the old way of smoking. No rehandling, consequently nicer appearing pieces of meat.

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CLEANING AND CURING HOG HAIR

By George E. Dyck, S. B., Ph. G.

Prevailing opinions as to the possibility, or practicability rather, of a rapid method for the cleaning and curing of hog hair seem to be at great variance, at present at least, although many devices and methods have been tested with varying results.

To fully understand the economic value of such a method, if it were to fully realize expectations, attention need be drawn only to the very tedious and costly process in vogue at this date. As is well known, the objects of the treatment of the hog hair are to remove dirt and impurities, as well as principally the membranes and particles of skin which adhere to the hair and which cannot be successfully eliminated from them in the process of scraping or in the scraping machine. While the loosely adhering dirt may be easily eliminated by washing the hair by any convenient means, there are these cuticles and skin remnants which necessitate the curing process, and it is this latter process of which it is the present aim to give the experience of one worker in this field who has given much thought to this problem.

The present method for the curing of hog hair consists of spreading the hair evenly out over a large surface of ground, called the hair field, where it is to remain for about from three to nine months, according to the season and climatic conditions. During this long space of time frequent turning of the hair becomes necessary, which involves a great expense to the manufacturer. Flies accumulate in these hair fields in astonishing quantities and deposit their eggs in the drying hair. The maggots hatching from the eggs then are the means of the curing process, through their great devouring capacity of everything of a meaty nature.

The hairs, thus deprived of the skin and other organic impurities by the feeding maggots, are now disconnected from one another through this very act of eliminating the connecting tissues. In due time the hair in the field becomes fluffy and loose and is then shaken up by means of forks or some similar devices, whereby the cylindrical maggots drop through the prongs of the fork and also through the hair itself to the ground below. The hair is removed to another place for complete drying, frequently turned until it is ready for the baling press, whence it goes to the manufacturer of brushes, felting, upholstery, etc.

A Tedium Way of Doing It.

Since this method depends entirely on the presence of the maggots, it becomes evident that the proper season must be awaited if results are expected, which is, at least, a very tedious situation, necessitating in addition the exposure of a valuable product to many hazards which may eventually affect its value. Numerous trials have been made to elaborate a means by which the curing process may be placed on a more controllable basis, and affecting a satisfactory cure in much less time than the old method requires.

It was but natural that recourse was had to such materials as the caustic alkalies, as sodium and potassium hydrates. Practical results of these tests, however, showed that not only did these chemicals remove the cuticles and similar impurities, but that they also

removed the oil and fatty constituents from the hair, probably by saponification. This was, however, not desired, since the removal of oily substances from the hair renders the latter friable, brittle and altogether unfit for the purpose for which it is intended, on account of the loss of the elasticity of the hair.

Hair thus treated is easily recognizable by its dead appearance, and the absence of the fluffy character of properly treated hair. Alkali-treated hair is useless, for instance, to the manufacturer of brushes, and is but a cheap material for the upholstering of the cheaper grades of furniture, while for felting and plastering it answers the purpose fairly well.

When the utter failure to produce a satisfactory cure by means of alkalies and alkaline carbonates became manifest, the nearest possibilities presented themselves in the mineral acids. Although effects of a fairly satisfactory nature were occasionally obtained, the resulting hair lacked in many points, which made it inferior to the maggot-cured article of the hair field. It was especially the absence of the lustre and partly also of the natural elasticity of the hair which detracted considerably from its appearance when seen alongside the slow process hair.

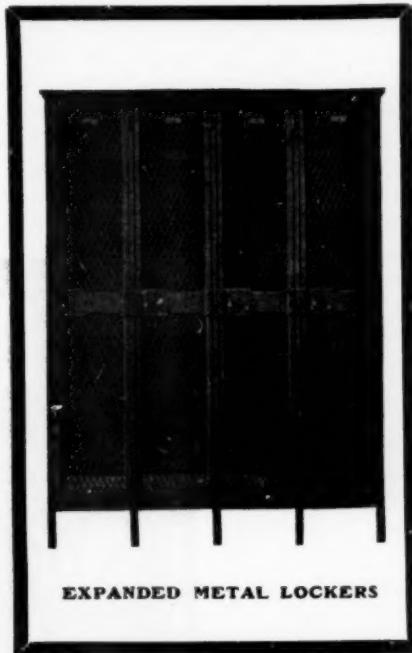
Natural Fermentation Method.

It occurred to the writer, who was then in the charge of some of the by-products departments of one of the largest packing-houses in this country, that the possibility of producing a natural fermentation within the skin adhering to the hair would overcome the difficulties experienced in the acid and alkali methods, inasmuch as by such means the fats and oils in the hair would not be disturbed, while, on the other hand, fermentation would destroy the albuminoids of the cuticle. The fibrous structures of the skin become disengaged on the elimination of the albuminoid matter, and are easily washed out from the hair by simple washings in tepid water, without the least injury to the hair, the same washings serving to eliminate the foreign impurities lodging in the hair.

The ferment employed and which suggested itself in an establishment of the nature of a packinghouse, and which is further closely related to the subject of the hog, was pepsin, and the process elaborated conformed closely to the action and peculiarities of this ferment under normal conditions wherever employed for the dissolution of albuminoid matter. It is well known that pepsin does not react as a ferment in the presence of alkaline substances, but that, on the contrary, some acid must be present in order to obtain fermentation.

To follow the natural process of digestion as closely as possible, hydrochloric acid was used in these experiments. The quantity of the acid employed, however, was insignificant and in keeping with the object of avoiding any corrosion of the hair surface by its action. About one pound of acid was used for every 100 pounds of dry hair, the acid being previously diluted with a sufficiently large quantity of warm water, which latter was required in order to provide the necessary moisture during the operation.

Instead of going to the trouble and expense



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of previously manufacturing the pepsin in a pure state, it was deemed advisable to use the scrapings of the raw hog stomachs instead. This procedure, requiring but a small amount of work, was found to fully suffice for the purpose, although it must be admitted that the employment of the pure pepsin would, necessarily, have proven of more rapid working, on account of the increased strength of the substance, which was partly weakened in these tests, because of the presence of the mucous stomach membranes which had also to be dissolved by the pepsin.

(To be concluded.)

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Swift's Little Cooking Lessons

Silver Leaf Lard



Swift & Company
U. S. A.

Pie Crust

Sift $2\frac{1}{2}$ cups flour twice. Add pinch of salt and $\frac{3}{4}$ teaspoonful baking powder. Mix thoroughly. Add $\frac{2}{3}$ cup Silver Leaf Lard. Rub flour and lard together between the hands until fine, thoroughly mixed, and no lumps remain. Add just enough ice water to moisten the entire mixture. Roll out lightly for tins, molding and handling no more than absolutely necessary, as working crust toughens it. Fill the lined tins, lay upper crust in place and press down around edges with fork slightly floured. Bake 20 minutes in medium hot oven. If accurately followed, this recipe will give an exceedingly light and flaky crust.

Swift & Company, U. S. A.

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WAITING

Less than two weeks remain up to the time when the new prohibitive German tariff will have to go into effect, unless in the last hour an agreement can be reached between the two governments. Cable reports from the Fatherland state with more or less certainty of tone that the Kaiser is very anxious to come to an understanding with the United States and that he will request the Reichstag to authorize an agreement on an extension of the present rates until it could be better ascertained than now whether a tariff war shall be unavoidable or not. In the same sense reports from Washington claim that Germany desires American assistance at the Morocco Conference, and would therefore be satisfied with formal concessions about re-appraisal of invoices. However this may be, it is evident that the two governments are fully aware of the gravity of the consequences of any injudicious act on either side at this critical time. We regret to state that the same understanding has not as yet dawned upon American legislators.

Only a few days ago one of the most prominent Western representatives, an alleged specialist on tariff questions, undertook to prove in a public speech that there are no dangers at all for the American export trade in a

tariff war with Germany. By the usual clever juggling with so-called statistical figures he demonstrated that neither grain nor meat products of any considerable amount have been exported to the Fatherland, from which he concluded that there was no reason at all for apprehension by the American farmers.

The only thing this and the other artists in "stand-patting" really prove by such arguments is their fear of the farmers' verdict at the Congressional elections next fall. And while it may not have been expressly admitted, it would appear that the most valid reason for the German government to be satisfied at present with formal concessions would be the consciousness of a fact which becomes clearer from day to day, that the next election will be a day of reckoning with the "stand-patters," and that the next Congress will show much consideration for the interest of American agriculture and of American consumers. An extension of time for serious negotiations will lead to a period when the conditions for an agreement will be much more favorable than at present.

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THE PERSECUTED PACKER

According to a recent rather ridiculous newspaper rumor the Chicago packers were going to pull up stakes and move to Canada on account of the way they have been harassed by the government and the "yellow" newspapers. While the official prosecution has developed into something very like persecution, yet it is extremely unlikely that the packers referred to would abandon their heavy investments at Chicago and move to a foreign field for any such reason. The meat industry in this country will weather the "yellow" assaults and the political manoeuvring of which it has been the victim. It is too big and too vitally important an industry to be suppressed by any mere human instrumentality. Crop failures or the decimation of herds and flocks by disease or storm might wreck the trade, but politicians or sensational writers—hardly.

It is much more likely that, instead of a packing exodus to Canada, there may in the near future be something like the reverse. If the recent Canadian government order prohibiting the slaughter of American hogs in bond in Canadian plants be adhered to, most Canadian pork packers will either have to shut down or move to the United States. Farmers across the border show little inclination toward providing an adequate hog supply. They preserve a "dog-in-the-manger" attitude, wanting all competition shut out while they raise as few hogs as they please and get high prices for them in consequence.

The fiction that the American hog makes inferior bacon, which is sold abroad under a Canadian brand, may serve their purpose for the time being. The United States can breed

a bacon hog of its own if it takes the notion, and American bacon can enter foreign markets under its own name and command the highest price. We can grow all the hogs necessary on this side of the line, and if Canadian packers are driven out of their own country by farmer politicians—of which we have a few here, making butter and trying to run the Agricultural Department at Washington—let them come over here and set up their plants. We'll supply the material and the market, and try to keep our politicians' noses in "pork barrels" of another sort.

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POISONOUS BUTTER COLOR

The framers of proposed pure food laws to be considered by Congress should not overlook a specific clause forbidding artificial coloration of butter, or at least the use of injurious colors. The practice of coloring butter has grown to such an extent that it is an abuse, even June butter being "dosed," as a rule. Most of the "color" is made from coal-tar dyes and other injurious substances. With all the hue and cry against certain harmless preservatives nobody has had the nerve to call attention to this health-destroying practice, merely because it hits the farmer. As a matter of fact, the average farmer does not have the slightest idea of what the coloring matter he buys contains. He purchases it at the supply house, and if it accomplishes its purpose he is satisfied.

There is no legitimate reason for coloring butter which does not apply equally to oleomargarine. Yet all color is practically forbidden in the latter. But there is no tenable excuse for using poisonous dyes in either. The law should define butter as such, and not permit chemical decoctions to parade as pure products, to the permanent damage of the people eating them.

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A PANIC IN PORK

American hog raisers who have lately been getting such good prices for their hogs from packinghouse buyers because of low stocks and the rush of foreign demand for pork products will be interested in the situation of their Servian brethren, against whom Austro-Hungary has lately raised a tariff wall similar to that which Germany puts up against American pork after March 1. As a result of the closing of the Austrian frontier to Servian livestock there is a panic among the hog raisers of Servia who have on hand great numbers of fat hogs about ready to market. The feeling is so strong against Servian government officials for permitting such a state of affairs to come about that it is said the present Servian cabinet will be forced to resign. American producers would be happy indeed did they feel they had as much influence at Washington in the present German crisis!

TECHNICAL AND SCIENTIFIC

ARTIFICIAL FOOD COLORS.

In a preliminary report on coloring matters used in foodstuffs Dr. W. G. Berry, of the Bureau of Chemistry, Department of Agriculture, classifies the following artificial colors: Vegetable: Carmine, cochineal, logwood, archil, caramel, burnt cochineal, liquorice, elderberry juices, etc. Coal-tar colors: Fuchsin, magenta red, diamond red, safranin, fluoresceine, eosines, ponceaus, Bordeaux reds, picric acid, benzopurpurin and various mixtures of several dyes.

"Vegetable colors are rarely used for flesh foods," says the report. "The normal red color of flesh is due to the presence of several coloring matters. Hemoglobin is the dark-purple coloring matter of venous blood. Oxyhemoglobin is the bright-red coloring matter of arterial blood. Lipochrome is the rosy-red coloring matter present in the muscular tissue of fishes. Healthy oysters may exhibit a green color, due to a pigment termed marenin. Normal horseflesh may exhibit a play of iridescent color.

"Various abnormal colors not due to added coloring matter may be: Yellow, due to food or to biliary compounds in disease; brown, due to greenish-brown pigments; dark purple, due to the animal having suffered from acute fevers, rinderpest, or tuberculosis, or to insufficient bleeding after killing; dark red, due to drowning or to suffocation in smoke (carbon dioxide poisoning); dark brown, hunted or overdriven; scarlet, from carbon monoxide poisoning or arsenic poisoning (Walley); diffused redness, from being frozen or to blood poisoning; iridescence, from disease of the blood in animals other than the horse; green or violet, commencement of putrefaction or diffusion of vegetable coloring matter through the membranes of the stomach after death (Walley). In diseased oysters due to green leucocytes; various chromogenic bacteria also produce bright red, blue, green or violet colorations.

"The artificial coal-tar colors used in sausages and meats in general, according to a German investigation, may be conveniently divided into the following classes:

1. Those which color the meat but not the fat. In this case the surface of the meat is coated mechanically with some of the color, while the fat remains perfectly white. These dyes are insoluble in petroleum ether and generally insoluble in ether.

2. Those which color the meat and fat uniformly red. These are only mechanically distributed and are not in solution, and by melting the mass the fat separates colorless. These are insoluble in petroleum ether and generally in ether.

3. Those which color the meat and fat a uniform red color, the color being in solution (soluble form). The separated fat from the melted mass remains red. These colors are in general soluble in ether and insoluble in petroleum ether."

The report gives three methods which may be used in the examination of flesh foods to detect these coloring matters.

DISINFECTANT NAPHTHA SOAP.

Since the production of carbolic acid from coal tar and also that of creosote from tar which is obtained from the distillation of leaved woods, has decreased in Russia, and since these products are chiefly imported from abroad, the works of Professor G. Chlo-

pin and his assistant on the action of the different naphtha products, and especially the naphtha acids, upon the micro-organisms are worthy of careful consideration, says Professor Lidow, in "Naphtha."

Chlopin has shown that these can compete with the very expensive carbolic acid so far as their price and antiseptic action is concerned. In a very short time the naphtha acids killed germs in emulsions of 1:2000, staphylococcus in such of 1:1000. An emulsion of 4 per cent. acted fatally on bacilli occasioning inflammation of the spleen. Only typhus bacilli and B. coli commune are much more capable of resistance. Neither of these are killed by a 10 per cent. emulsion in an hour, but require thirty hours' influence.

The quantity of naphtha acids and phenol varies greatly in the different kinds of earth oil and masut. It can be reckoned, on an average, as follows: Baku masut, 1.12 per cent.; Grosny masut, 1.24 per cent.; Bibi Ejbat earth oil, 0.83 per cent.; Balachany earth oil, 1.12 per cent.; Grosny earth oil, 1.30 per cent.

As is evident, the content of naphtha acids in earth oil is very important. Since the naphtha acids boil and distil with temperatures between 250 degrees and 370 degrees C. they collect chiefly in the heavier fractions of petroleum and solar oil and can be easily withdrawn therefrom. Instantaneously large quantities are obtained from the waste lyes of the petroleum.

The mixture of the crude naphtha acids, as it is obtained in the factories (in Grosny and Schibajew, in Baku), represents a dark, easily moved fluid with the average specific gravity of 0.965, which distils without decomposition up to 360 degrees C. The acid number of the purified distilled naphtha acids amounts to about 206, that of the unrefined (still containing carbureted hydrogen) to 220. The naphtha acids do not unite with iodine as saturated combinations, wherefore the crude, unrefined carbureted hydrogens containing acids, have an iodine number of from 1.4 to 3.9. The acids saponify very easily with caustic alkalies and alkali carbonates, but the soap obtained does not have a firm consistency and therefore, in order to obtain a firm soap, at least from 25 per cent. to 30 per cent. of animal fat or coconut oil must be added to the naphtha acids. Moreover, the alkali naphtha soaps are very easily soluble in salt solutions and in coconut oil, therefore naphtha acids can be made use of for the manufacture of lime soaps.

The mentioned work of Chlopin shows that the naphtha acids have a considerably greater value than to be used merely as material for soap boiling. It is much more sensible to add the naphtha acids in the required quantities to the prepared soaps in order to produce thereby a disinfecting soap. As laboratory experiments showed, an addition of 3 per cent. of free naphtha acid to neutral oleine soap in no way impairs the character of the soap and the acids are equally distributed in the soap emulsion obtained. In this way inexpensive disinfecting soaps can be obtained which contain from 1 per cent. to 5 per cent. of free acids.

It is very probable that for this purpose the crude acids need not be completely puri-

fied by distillation, since a small content of carbureted hydrogen and phenols cannot reduce the disinfecting properties of the soaps to an important extent. For certain special purposes a thick emulsion could be produced from fluid potash soap and free naphtha acids.

TO RECLAIM INSOLUBLE TANNATES.

E. M. Payne, Aylesbury, Eng., claims in a patent of his recent invention the recovery and utilization of the insoluble leather-forming constituents contained in waste tanning materials and liquors. These waste materials and liquors are treated with an alkaline solution, as caustic soda, which dissolves the insoluble active tanning matters; the liquor then, if necessary, may be made neutral. Neutral or slightly acid skins are immersed in the liquor and afterwards treated with an acid, with or without subsequent tanning.

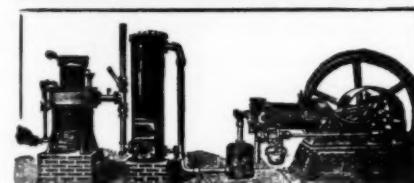
TO BLEACH HORN.

Besides bleaching by hydrogen peroxide, horns can be bleached by immersing them for a short time in water slightly mixed with sulphuric acid, chloride of lime or chlorine, or they may be exposed in the moist state to the fumes of burning sulphur, largely diluted with air.

Second-hand machinery in good order. You want to get rid of it quick and at a profitable price. An inch on page 48 will do it.

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Builders and Dealers in ENGINES, BOILERS, Tanks, Stacks, Standpipes, etc.; Bridge and Architectural Iron Work; Railroad, Cotton, Saw, Fertilizer, Oil and Ice MACHINERY and Supplies and Repairs; Shafting, Pulleys, Hangers, Leather and Rubber Belting and Hose; MILL SUPPLIES and TOOLS; Foundry, Machine, Boiler and Bridge Work. Capacity for 800 hands.



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THE PROFITABLE BOSS MACHINES.

The Cincinnati Butchers' Supply Company has won a world-wide reputation for the excellency of their Boss machines. They build these in their own mammoth factory under their own patents. Their Boss Meat Cutters and Boss Meat Mixers are known for their wonderful, fast and profitable work, and their new Boss Back Fat Skinner has equally superior merits. Readers are advised to consult the advertisement of the company on another page for details concerning these machines.

It will interest packers to learn that skins taken from back fat are in active demand at a good price. The skins sold will soon pay for the machine, while the quality of the lard rendered without the skins is very much improved, because the skin when rendered is turned into gluten, which is a positive detriment to lard.

RECENT FRICK SALES.

Following is a list of recent sales of Eclipse refrigerating and ice-making machinery by the Frick Company, Waynesboro, Pa.:

Jamison Supply Company, Greensburg, Pa., one 6-ton refrigerating compression side and direct expansion piping for storage rooms to be installed in packinghouse at Hannastown, Pa.

Edward E. Rieck Company, Pittsburgh, Pa., one 250-ton refrigerating machine, to be installed in ice cream factory at Pittsburgh, Pa.

Centreville Ice Factory, Centreville, Pa., one 10-ton ice-making plant, to be installed in ice factory at Centreville, La.

Midlothian Ice, Light & Water Company, Midlothian, Texas, one 8-ton ice-making plant, to be installed in ice factory at Midlothian, Texas.

Amarillo Ice & Cold Storage Company, Amarillo, Texas, one 30-ton ice-making plant, to be installed in ice factory at Amarillo, Texas.

Maringouin Gin & Mfg. Company, Maringouin, La., one 10-ton ice-making plant, to be installed in ice factory at Maringouin, La.

Columbus Packing Company, Columbus, O., direct expansion piping, to be installed in packinghouse at Columbus, O.

James F. McMorris, Pittsburgh, Pa., one 4-ton refrigerating compression side and direct expansion piping for beer vault, to be installed in storage house at Pittsburgh, Pa.

Topeka Cold Storage, Ice and Fuel Company, Topeka, Kansas, one pair of ammonia compressors of 20 tons ice-making capacity, to replace those of another make; also general overhauling of machine.

National Ice Company, San Francisco, Cal., one 25-ton ice-making plant, to be installed at Santa Rosa, Cal.

Covington Ice & Cold Storage Company, Covington, La., one 25-ton ice-making compression side, 20-ton freezing and distilling system and direct expansion piping for storage rooms, to be installed in ice factory at Covington, La.

Crystal Ice Company, Jennings, La., one 20-ton ice-making plant complete, to be installed in ice factory at Crowley, La.

W. C. Routh & Company, Logansport, Ind., direct expansion piping for storage rooms, to be installed in packinghouse at Logansport, Ind.

Hoffman & Kent, Asheville, N. C., one 20-ton refrigerating compression side, 10-ton freezing and distilling system and direct expansion piping for storage rooms, to be installed at Asheville, N. C.

Gus Yunker, Madison, Ind., 5-ton freezing system and 5-ton distilling system, to be installed in packinghouse at Madison, Ind.

Colorado Salt Company, Colorado, Texas, one 20-ton ice-making plant complete and

direct expansion piping for storage rooms, to be installed in plant at Colorado, Texas.

Edward E. Rieck Company, Pittsburgh, Pa., one 32-ton freezing system, to be installed in ice factory at Pittsburgh, Pa.

F. Pitt Hotel Company, Pittsburgh, Pa., brine piping for storage boxes, to be installed in F. Pitt Hotel, Pittsburgh, Pa.

Portsmouth Ice & Cold Storage Company, Portsmouth, O., one 35-ton ice-making compression side, to be installed in ice factory at Portsmouth, O.

R. A. Long, Beaufort, S. C., one 25-ton ice making compression side, 15-ton freezing and 25-ton distilling system, to be installed at Beaufort, S. C.

St. Louis Brewing Association, St. Louis, Mo., one pair of ammonia compressors to replace those of another make, 50 tons refrigerating capacity, to be installed at Heims Brewery, East St. Louis, Ill.

L. M. Davenport, Spokane, Wash., one 6-ton refrigerating compression side, to be installed at Spokane, Wash.

Ryan & Newton Company, Spokane, Wash., brine piping for storage rooms, to be installed at Spokane, Wash.

Philadelphia & Reading Railway Company, Philadelphia, Pa., one 100-ton refrigerating machine and 200-ton triple pipe brine cooler, to be installed in Reading Terminal, Philadelphia, Pa.

Jackson Brewing Company, Cincinnati, O., one 85-ton refrigerating compression side, to be installed in brewery at Cincinnati, O.

G. Cramer Dry Plate Company, St. Louis, Mo., one 20-ton refrigerating compression side, to be installed at St. Louis, Mo.

Gast Brewing Company, St. Louis, Mo., one 4-ton refrigerating compression side, to be installed at St. Louis, Mo.

Brookhaven Ice Mfg. Company, Brookhaven, Miss., one 25-ton refrigerating compression side, 20-ton freezing and distilling systems, to be installed in ice factory at Brookhaven, Miss.

Union Dairy Company, St. Louis, Mo., one 12-ton ice making machine, to be installed in their new plant at St. Louis, Mo.

VARIABLE SPEED MOTOR DRIVE.

The wonderful thing about variable speed motor drive is the facility with which the machine hand can alter the operating speed of his equipment, whether it be $\frac{1}{2}$ horse-power drive or 100 horse-power drive. The manipulation of the motor controller lever enables the machine hand to adjust the operating speed of his equipment instantly and without effort. What a revelation to the machine hand of ten years ago, who secured the necessary speed variations for his machine by the laborious shifting of belt on cone. Northern variable speed motors are especially designed to respond to the motor controller with minimum effort of the machine hand and to secure promptly the graduation of motor speed suited to the work or his own dexterity. Booklet 39, showing some motor

drives embodying Northern variable speed motors, is sent upon request by the Northern Electrical Manufacturing Company, Madison, Wis., U. S. A.

THE DIVINE WATER MOTOR.

A new and very useful article offered by the Smith & Hemenway Company, 296 Broadway, New York, publishers of the Green Book of hardware specialties, is shown herewith. It is a water motor which actually develops $\frac{1}{2}$ break horse power on 80 pounds pressure from a city main, using No. 150 nozzle, or about $\frac{1}{2}$ -inch stream; 80 pounds being the ordinary pressure from a city main. Motors are furnished this way unless specially ordered. However, the makers can supply larger nozzles where the power is greater.

The little motor develops a speed, on pressure mentioned above, of 5,000 revolutions per



minute, with an ordinary 5-inch emery wheel or a 9-inch buffing wheel, for polishing. The emery wheel is suitable for grinding knives, scissors, razors, hatchets, hammers, or in fact any edged tool. The buffing wheel is suitable for polishing, cleaning and buffing any metal surface. This will be found a valuable addition to any butcher shop, boarding house, restaurant, dentist, office or private house where any grinding is to be done. It also has sufficient power for running sewing machines, small lathes, scroll saws, dynamos, etc.

The illustration shows the motor attached to an ordinary screw sink faucet in a private residence and can be adjusted to either the right or the left hand side. The motor is said to be almost indestructible. Being strongly built, it will last for years without any repairs, and is so perfectly made that all the parts are interchangeable. Extras can be had at nominal expense. The total weight complete, put up one in a box, with polishing wheel or buffing wheel, emery wheel, stick of polish, is $6\frac{1}{2}$ pounds. Printed matter and prices will be sent on application.

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**SEE PAGE 48
FOR BARGAINS**

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SHOPS ARLINGTON, MASS.
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WOOD'S ICE TOOLS.



GIFFORD'S ELEVATORS AND CONVEYORS

See Exhibit, Section J, 103, at National Dairy Show, Coliseum, Chicago, February 15-24, 1906.

SEND FOR CATALOGUES.

Camden, N. J.—The Old La Grange Warehouses, brewers, wine growers and merchants, etc., have been incorporated with \$1,200,000 capital stock, by E. R. Dumont, E. A. St. John and William Murray, all of Camden.

Keyser, W. Va.—V. F. Alkire, W. W. Woods, H. G. Woolf, W. H. Griffith and O. A. Hood have incorporated the Merchants' Cold Storage Company with \$50,000 capital stock to establish a cold storage plant.

Dexter, Mo.—The Dexter Ice, Fuel and Power Company has been incorporated by J. E. Armstrong, J. N. Miller, E. E. Disher and others. The capital stock is \$12,000.

Stanford, Minn.—The Crown Farmers' Creamery Company has been incorporated with \$3,200 capital stock by B. H. Stoeckel, L. G. Griep, Albert Kruesel, Carl Grannis, Herman Hass, Henry Stoeckel and Fred Most.

Tioga, Ill.—George W. Frazer, Henry Barth and G. S. Reese have organized the Tioga Creamery Company, with \$5,000 capital stock.

Stuttgart, Ark.—The Stuttgart Creamery Company has been incorporated with \$10,000 capital stock, of which \$3,000 has been subscribed, to deal in dairy products. The incorporators are M. S., C. G. and E. J. Van dusen.

Louisville, Ky.—The Independent Ice Manufacturing Company has been incorporated with a capital stock of \$20,000 by Edward N. Simon, Nellie T. Simon and Meinrad Oeschner.

ICE NOTES.

Magnolia, Miss.—The entire plant and equipment of the Magnolia Ice Manufacturing Company will be sold on February 26, under a deed of trust.

Detroit, Mich.—The Detroit Creamery Company contemplates the increasing of its capital stock about \$40,000, and installing an ice making plant.

Chicago, Ill.—The Chicago Restaurant Men's Association, it is said, will shortly begin the erection of an ice plant to cost around \$100,000, and to have a capacity of 100 tons daily.

Peoria, Ill.—The Peoria Artificial Ice Company is having plans prepared for a new ice plant, with 50 tons daily capacity. About \$50,000 will be expended.

Savannah, N. Y.—The Savannah Creamery was damaged by fire on February 11 to the extent of \$5,500. It is insured for \$4,000.

Beckwith, Cal.—The National Ice Company contemplates the erection of an ice plant at this point, it is reported.

Howard Lake, Minn.—The Howard Lake Creamery was partially destroyed by fire on February 11, causing a loss of \$3,100; insured.

Davidson, Mich.—The creamery of Albert Armstrong was destroyed by fire. The loss is \$9,000, with insurance of \$1,500.

Harrisburg, Pa.—A company is being organized to be known as the Harrisburg Ice Manufacturing and Cold Storage Company, with \$56,000 capital stock.

(Additional refrigeration notes will be found on page 17.)



APPARATUS FOR ICE MACHINE ENGINE ROOM.

By F. E. Matthews.*

Probably no one subject presented at the recent New York meeting of the American Society of Refrigerating Engineers has given rise to more argument than that of "The Practical Value of Indicating the Ammonia Compressor" and the subsequent discussion which it prompted. The subject was introduced to the society by W. Everett Parsons, who, in a very interesting and instructive paper, illustrated by ammonia compressor indicator diagrams, set forth very clearly a few examples at least, in which the timely use of an ammonia compressor indicator was able to point out the way to greatly increased compressor efficiencies.

As suggested in the discussion which followed there is no doubt but that accurately graduated thermometers inserted in the suction and discharge pipes of compressors indicate many of the things which the ammonia compressor records. This would seem to fix the relation of the former to the latter, in so far as the thermometers are able to perform the functions of the indicator, as being about the same as that of an indicating to an intermittently operated recording, electrical or other instrument.

Those, if any there be, who expect to see the thermometer replace the indicator, however, must remember that outside of the cold-blooded practical constituent there is a very formidable obstacle to be figured with in the sentimental side of the question. The indicator, that little snapshot outfit by which a picture can be made of the invisible operations taking place inside of a visually impenetrable iron cylinder, the little apparatus which makes permanent records of instantaneous occurrences and draws graphical representations of cycles traversed so rapidly that even the quickness of thought is too incomparably slow to follow them, has come to be known as the engineer's friend. It has won its way to our hearts and many of our old indicator cards (beautiful souvenirs) are such vivid reminders of happy experiences, past and gone, that their perusal makes imaginary ammonia expand into our noses, deflecting our sentimental dew points until we have to wipe our eyes to free them from the briny (NaCl) precipitate.

Whether or not thermometers will ever be able to make so important a claim on our affections remains to be seen. It must not be disputed, however, that up to the time the oiler hangs the chain-falls in them (granting that Providence withholds other occurrences equally discouraging to thermometers) they prove very useful as well as ornamental appendages to the usually none too ornate compression machine. At first glance the outlook for the thermometers is not a very encouraging one. In dealing with gases we have three factors to consider—volume, pressure and temperature, the last of which is the all-important one, as it is the yardstick by which

*From Cold Storage and Ice Trade Journal.

we measure heat. In determining whether or not the mechanical conditions of an engine or compressor are what they should be, however, pressures seem to be the best guides. Temperatures, even if it were possible to obtain a record of their variation during the cycle of operations taking place within the cylinder of an engine or compressor, would not necessarily indicate the pressures. In the first place the element superheating has to be taken into account, and even granting conditions in which $P \cdot V = T \cdot x$ a constant (in which P stands for pressure, V for volume and T for temperature), the temperature, which we observe, and which is more or less of an average, is equal to the product of two variables, pressure and volume, so that without a corresponding record of the former, at least, a record of the temperatures loses much of its value. The indicator, on the other hand, is a convenient means of plotting a graphical record of the relative magnitudes of the successive pressures and volumes inside of the cylinder. Thermometers, as generally employed, only indicate, in a more or less accurate way, the magnitude of the temperatures outside of the cylinder.

Like the indicator, but to a far greater extent, the value of thermometers on the suction and discharge pipes of compressors is not wholly appreciated even by the technical refrigerating engineer, and much less by the so-called practical operating engineer, who only too often considers that in putting his machinery in good working order once a year he is relieved of the greater part of his responsibility so far as economical operation is concerned for at least a year.

To put the engine and compressor equipment of a plant in the best possible mechanical condition once a year is indeed a worthy cause. To keep it in good condition throughout the year is another, and the use of a good indicator is the best means we know of for helping attain and maintain these desirable conditions.

The indicator is rarely if ever employed to its maximum advantage. The best indicator obtainable, kept in the best possible condition, and operated by the most intelligent man available, produces cards which are none too good. What can be expected when usually, sometimes two and occasionally all three of these conditions are lacking? Even good cards, unaccompanied by proper records of other important observations, impart about as much information as a superficial glance at a set of ammonia tables. A few facts can be grasped at a glance, even at an ammonia table, but much careful study has to be expended in order to discover the underlying physical laws from which the numerical results embodied in the table are determined. A curve in a line which is supposed to be straight is readily recognized without any straight line for comparison; a variation in an angle which is supposed to be a right angle is likewise easily recognized, but a variation in an expansion or a compression curve from the corresponding isothermal or adiabatic line which is only one of an indefinite number of such lines, no two of which are alike, because of their changing eccentricity, cannot be even approximately judged without the presence of the appropriate line for comparison. As important as this point may seem, and we are inclined to think that every engineer will



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Cincinnati, 220 West Third St., McHugh's Express.

Indianapolis, 712 S. Delaware St., Central Transfer & Storage Co.

Louisville, 7th and Magnolia Sts., Louisville Public Warehouse Co.

Chicago, 16 North Clark St., F. C. Schapper.

544 North Water St., Wakem & McLaughlin, Inc.

Milwaukee, 136 West Water St., Central Warehouse.

Baltimore, 301 North Charles St., Baltimore Chrome Works.

Washington, 26th and D Sts., N. W., Littlefield, Alvord & Co.

Norfolk, Nottingham & Wrenn Co.

Savannah, Bringhorne and Montgomery Sts., Benton Transfer Co.

Atlanta, 50 East Alabama St., Morrow Transfer Co.

Birmingham, 1910 Morris Ave., Kates Transfer & Storage Co.

Jacksonville, Atlantic Coast Line Ave., St. Elmo W. Acosta.

New Orleans, Magazine and Common Sts., Finlay, Dicks & Co., Ltd.

Liverpool, 19 South John St., Peter R. McQuie & Son.

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money. As a means of determining the back pressure the indicator is of minor importance since it is applied only periodically. The value of thermometers is also limited, because their readings depend on the humidity of the gas as well as the pressure. The usual back pressure gauge graduated in five pound dimensions and often located at some point in the engine room where it cannot be read within two or three pounds is almost equally useless so far as economical operation is concerned, its principal object being to serve as a more or less erroneous index to the conditions existing within the expansion coils while pumping out. For the economical operation of the compressor plant there is but one instrument capable of supplying the normal stimulus necessary to make the running engineer pay due attention to the handling of his back pressures and that is the ammonia back pressure recording gauge, having a spring of such strength that a variation of not only five pounds, but half a pound can be readily observed.

(To be concluded.)

THE PACKERS AND CATTLEMEN.

(Continued from page 18.)

ment began to enforce the law against fencing these lands. The range cattleman has not found and cannot find a substitute for the fenced range of which he has been dispossessed. Without fences his herds cannot be kept together. This increase in the hazard of the range cattle business has made this class of cattle a poorer loan risk. Loans have been withdrawn, thus imposing an additional burden upon the cattleman. Therefore, he has bowed to the inevitable and has broken up his herds.

Some of the cattle from range herds so dispersed have found a market among Western feeders, but the bulk of them have come to market and have been sent to the slaughter houses. Then, too, the wonderful abundance of grass has helped to make 1905 almost a record year in the number of cattle sent to market. The West, from Texas to Canada, has been literally a garden as to pasture.

These cattle have been a weight on the market for the past two years. During the past season 380,000 head of range cattle have been marketed in Chicago alone—a larger number than was ever received in this market during a similar period except in 1894. At all the market points for Western cattle the receipts will total about three-quarters of a million head.

Higher Priced Beef Predicted.

Very many of the big range herds have already been broken up. Next year will, I think, see fewer range cattle in the market than this year, and the year after still fewer. If one were in a prophetic mood he might say that these conditions will produce, in a few years, much higher-priced cattle and consequently higher-priced beef. We shall continue to raise beef cattle in this country, but at greater expense. It has taken, on the range, ten to twenty acres to produce a steer, but these acres cost practically nothing and the steers made good beef. Sometimes they competed with choice fed steers for the export trade. Fewer acres will produce a steer on a Western farm, but acres, many or few, will represent much money—\$5 to \$100 an acre—invested in the bare land, and that will mean a costlier steer.

Sheep prices are now high—very high. There is a big demand for both mutton and wool and the supply does not keep pace with it. Hog prices have averaged very high for a period covering the past four years. Now, the handling of hogs is almost as big a part of the packers' business as is the killing of cattle—and the sheep department is not much behind either of these branches.

If all the packers, or any of them, were in a combine to depress prices, why should they neglect sheep and hogs? To do this would be to fall far short of the business shrewdness with which their enemies credit them. In the last few years raisers of sheep and hogs have universally made great profits while the cattlemen have suffered to a considerable extent—and all because of natural conditions wholly beyond the control of the packers. The cattle business has been in a transitional condition—the subject of fundamental changes which have thrown immense numbers of cattle on the market and forced a period of low prices. This is the whole story.

Packing Industry Is Not Understood.

Sober-minded men never would cry "monopoly" in relation to the business of the packers if they understood that business. While the meat industry is probably the largest in the country, it is less known than many of far less consequence. Its character and magnitude have never been comprehensively presented to the public. A comprehensive and authoritative compendium of this industry is to be found nowhere outside of government reports.

Unfortunately for a clear understanding of many questions of public moment, these reports are not popular and widely read literature compared with the "best sellers" of the book stores. The last census figures are now five years old, of course—the facts they express are still "new" to a majority of the people—but because they are the only official figures extant they will be used to illustrate points in this article. The conditions they reflect still hold in the main. Any changes that might be made in them would strengthen rather than weaken the packers' case.

This alleged "beef trust" cannot be seriously regarded as monopolizing the dressed beef and packing industry in the face of official government figures, backed by the investigation recently made under Mr. Garfield, chief of the Bureau of Corporations of the Department of Commerce. It is admitted now, even by most of its critics, that the so-called "beef trust" handles less than 50 per cent. of the beef and packing industry of the country. This is the statement in Mr. Garfield's report, and, as will be shown later, that the industry holds this moiety of the business only by the advantage of foresight, superior organization and superior business methods.

But these advantages are not enough to give such a "combine" a monopoly of the dressed-beef and meat-packing industry. The industry is too widely distributed, is too deeply rooted in too many widely-separated localities to be monopolized. Without having analyzed the figures in this express relation, I feel safe in asserting that the packing industry holds a higher relative position as to value of product in more States and cities

than any other industry in the country. There were, in 1900, 921 meat-packing establishments in the United States. This figure did not include establishments that slaughtered only; those were classified separately in the census reports of 1900; it included only those that both slaughtered and performed the other functions classed under the head of packing and utilization of by-products, and there were 921 of them.

Does This Show Packers' Control?

These packing houses were distributed among forty-two of the forty-nine States and Territories and the District of Columbia. All of these States except nine had three or more packinghouses. In twenty-six of them the industry amounted, back in 1900, to more than one million dollars each annually.

This industry ranked first among manufacturing industries in value of product in each of six States—Illinois, Indiana, Iowa, Kansas, Missouri and Nebraska. In California it ranked second only to sugar refining. Maryland—never thought of as a meat-packing State—gave it fourth place, as did Minnesota, Oregon and Washington. It held seventh place or higher—probably much higher now in widely different States, each having several specialties—in New York, Ohio, Kentucky, Rhode Island, Texas and Wisconsin. Does that look as if it were a monopoly confined to the five or six Western States where the large packers had their business concentrated?

In looking at the packing industry alone we find, of course—Chicago having developed it—that Illinois led in 1900 in volume of product, with over one-third of the total. Kansas and Nebraska were second and third, on account of the large houses at Kansas City, Kansas and South Omaha, Nebraska, each with almost 10 per cent. of the total. But what other State do you think ranked fourth in packing-house products? None other than New York, and Indiana was fifth. The next eight named in the order of their rank as packing States were: Missouri, Massachusetts, Iowa, Pennsylvania, Ohio, California, New Jersey and Wisconsin. Each of those eight produced in 1900 17-10ths to 5½ per cent. of the country's total packing industry product.

A Supply and Demand Business.

The packing industry is thus widely distributed and deeply rooted because it is a supply and demand business that can be established wherever natural supply and demand conditions permit. No other industry of comparable importance is so close to the people in all aspects or so closely knitted into the fabric of national prosperity. It has grown as the nation has grown, and has contributed its share—I might truthfully say more than its proportionate share—to general and individual prosperity. In the fifty years from 1850 to 1900 the total paid for the raw material used in the industry, the product of American farms, was raised from \$9,451,096 to \$683,583,577—was multiplied by seventy-five.

The period of most rapid development was the decade from 1870 to 1880; that was due to the development of the refrigerator car for shipping fresh beef, development of the export trade, development of the canning feature of the business, and development of by-product utilization—120 distinct by-products now being made by the packinghouses. During the next decade, 1880 to 1890, the great Chicago packinghouses took commanding position.

The stock grower or cattleman who makes a business of raising, finishing and marketing beef cattle does not need to be told that there is no combine of packers to depress the price of his stock. His smaller neighbor, who raises a few cattle as a "side line" in connection with his farming operations, and who does not closely follow market reports, crop reports, and who does not analyze conditions in the cattle business, may be easily led into error along with the unanalytical general public.

(Concluded on page 28.)

THE POWELL PATENTED "WHITE STAR" GATE VALVE

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PROVISIONS AND LARD

WEEKLY REVIEW

All articles under this head are quoted by the bbl. except lard, which is quoted by the cwt. in tcs., pork and beef by the bbl. or tierce, and hogs by the cwt.

Occasional Bursts of Strength and Higher Prices Followed by Slackness—"Shorts" Forced Into Covering—Undertone a Fairly Healthy One from the Moderate Rate of Hog Marketing and a Slow Growth of Products Stocks—Still Higher Hog Prices—Expected Larger Hog Supplies Because of the Colder Weather—Hog Cholera Scare Exerts a Temporary Influence. Moderate New Foreign Demands—Active Home Distributions—The Closing Market Is Tame and Likely to Be Easier if Hog Receipts Enlarge.

Notwithstanding the fact that the hog products markets got an occasional twist for higher prices, and that from the cost of hogs that there would be reason for permanently better prices for them. Besides that the stocks of the products at the packing points are not as yet growing in a large way. Nevertheless, the fact remains that it is doubtful if the hog products markets are, as yet, in shape for a secure line of better prices than those made this week, although that the expectations are that ultimately still better figures will prevail in them.

Rather the feeling is that the hog supplies at the packing points, now that cold weather is spreading over the West, will be of sufficient volume in the near future to throw the products markets a little more than they have been latterly in buyers' favor, temporarily at least.

While it is improbable that the hog supplies are back in farmers' hands as largely as some trade sources had thought a few weeks since, probable they were, yet there is little doubt but that here has been a considerable held back hog supply, and that as it is marketed in the near future it would be unwise to look for further permanently higher products markets.

The cost of hogs by relation with the products markets should insure even now a higher range for the products, but the hope that hogs will be had for less money is not altogether out of packers' calculations. It is as well quite certain that hogs should be upon a cheaper market basis or the products more materially than they are at present in the sellers' favor.

The hog prices this week at the packing points have gone close to \$6.25, and while the products markets have hardened they have not done so proportionately with the hog prices.

It is somewhat confusing to the opinions that hogs have been liberally held back for feeding, that their average weights as they are now being marketed at the packing points do not show heavier average. Nevertheless all reports from the West imply that hogs have been held in the interior for feeding, though the long period of mild weather in sufficient volume to make an important factor in all around prices, however less in volume they had been held as concerns some late expectations regarding the supply.

The more important hog supply, as feeling the free feeding from last year's corn crop, is a matter for spring months' consideration, and it is altogether probable that in the spring months some calculations of a full order that had been made in relations to the season's hog supplies will be reached, rather than in the nearer future they will be shown as correct.

A protracted period of cold weather would be beneficial to the products markets in the near future, since it would hasten forward the hog supply in marketable condition, and after it had been freely secured an opportunity would be afforded for the products markets to take on the permanent tone

justified by their actual positions of a good general, and larger than usual consumption.

The turns to better prices for the products at times through the week, has been occasioned more by fright of the "shorts," and who then covered freely, while they became scared upon such days as the hog receipts at the packing points were moderate with higher prices for them, and as there was circulation of reports of hog cholera in Nebraska and Kansas.

But all speculation, and it has been fairly active in the May and July options, has been satisfied with small profits, with a good deal done by scalpers, while it has been clear that no source of buying was inclined to protracted holding on the "long" side.

On the whole there is a peculiar situation of the products markets and which is a puzzle to most of the traders.

On the one hand are statistical conditions, large consumption and the full cost of hogs, inviting confidence with a better line of prices, while in opposition to those features is the fact that the foreign demand for the products has lulled, although that the home demands continue of a full order, and that there is the belief that the incoming hog supply will be of a sufficiently large order to make important additions to the stocks of the products.

After three or four weeks more of the intermittent trading with the continental markets it can be expected that there will be resumption of buying by them, but of an ordinary season's character and not, of course, of the extraordinary degree, had from them in advance of the new German tariff. And the continental markets will get the importations if not in a direct way then in the indirect way that is well understood by trade sources with their many years before ex-

THE W. J. WILCOX

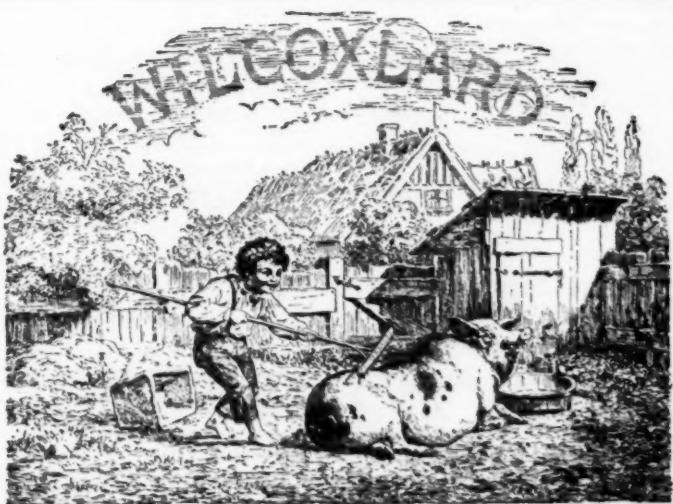
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periences with so-called prohibitive tariffs, but as they have been only directed against one country.

The continental live stock supply which had been held back for feeding and with expectations of increased prices for it, when the new tariff against products is in force, is now beginning to be marketed, and there are increasing amounts of foreign meats and fats for sale.

The tallow and oleo oil have been affected to lower prices in competition with the American products, and they have as well influenced in the buyers' favor the markets for the latter upon the foreign markets.

But the consumption is of that large order in the continental and United Kingdom markets that their larger livestock supplies products will tide them along for only limited time, and that they must necessarily resume buying in this country to the indicated volume.

Estimated Chicago stocks: 10,000 bbls. old pork (14,982 bbls. Feb. 1); 15,000 bbls. new pork (26,652 bbls. Feb. 1); 27,000 tcs. contract lard (17,577 tcs. Feb. 1); 8,500,000 lbs. ribs (5,870,000 lbs. Feb. 1).

The exports from the Atlantic ports have been as follows: Last week, 5,125 bbls. pork, 18,899,890 pounds meats, 18,277,398 pounds lard; corresponding week last year, 5,034 bbls. pork, 14,679,304 pounds meats, 15,385,482 pounds lard; from Nov. 1, 69,236 bbls. pork, 214,302,086 pounds meats, 260,081,445 pounds lard; corresponding time in the previous year: 51,790 bbls. pork, 184,223,444 pounds meats, 175,911,881 pounds lard.

The increase of exports from Nov. 1 is 3,499,200 pounds pork, 30,078,642 pounds meats and 84,169,564 pounds lard.

The United Kingdom has taken since Nov. 1: 164,178,086 pounds meats (158,716,824 pounds previous season), and 97,188,298 pounds lard (80,576,769 pounds previous season). The continent: 43,004,214 pounds meats (18,742,769 pounds previous season) and 139,508,668 pounds lard (77,755,075 pounds previous season).

In New York the export business in pork is moderate at firm prices. Sales of 380 bbls. mess at \$16@16.50, 250 bbls. short clear at \$15.50@17. 100 bbls. family at \$17. Lard is firm at \$7.80@7.95 for Western steam, and at \$7.50 for city. Compound lard at 6@6½c. In city meats moderate trading in bellies at steadier prices. 14 lbs. average, loose, pickled bellies, at 8½@8¾c.; 12 lbs. average, at 8½@8¾c.; 10 lbs. average, 8½@8¾c.; loose pickled shoulders at 7c.; loose pickled ham at 9½@9¾c.

BEEF.—Prices are well supported on a fairly active distributing business. City extra India mess, tcs., \$17.50@18.50; barreled mess at \$8.50@9.50; do., packet, \$10.50@11; family, \$12.50@13.

THE PACKERS AND THE CATTLEMEN.

(Concluded from page 26.)

Go where you will throughout the cattle country—the grazing States or the feeding States where range cattle are "finished" for market—and you will find cattlemen among the prosperous men of the community. They are a wide-awake, energetic, progressive class. They are raising and marketing cattle, not for fun or for their health, but to make money. They do make money—not in all seasons of the year, nor every year—few do in any business—but in the long run a

good proportion of them have prospered. It is obvious that any combine of cattle buyers that would put down prices so that these men could not make money would ruin the cattle business, cut off the livestock supply upon which the packing industry depends, and thus ruin the packing business. Do business men knowingly commit business suicide?

The packers could not by a combination control the market price of live cattle. The very nature and character of the business forbids that. They would not do it if they could. That would be business suicide. The packers have greatly helped to develop the cattle business. That they have been moved by no philanthropic motive, but by cold business sense, does not alter the fact. They had a business of their own; they saw opportunities, wide as the world, for developing and extending that business; but to utilize those opportunities they had to encourage development of the cattle business. This they did, not merely by building an industry that furnished an every-day market for cattle, but they did it by personally lending their aid to specific developments of the stock-raising business.

Packers and Cattle Prosperity.

The most casual review of the period prior to the development of beef refrigeration and beef canning shows that weak, uncertain market conditions were the rule. The entire trade was on a hand-to-mouth basis. The cattle raiser had no stable market, and speculators fleeced him at every turn.

In the first twenty years after refrigerating and canning were commenced by the Chicago packers the population of the country increased 50 per cent.; the number of cattle shipped and marked by the cattlemen of Western ranges and Middle Western corn farms increased 500 per cent. The marketing of this immense production at a profit was made possible only by the packers' energy, the utilization of by-products, the establishment of new markets and by pushing the business to the utmost bounds of the earth.

There is no attempt to deny that at certain times the prices for live cattle are unprofitably low—the natural result of a temporary oversupply; but it should be remembered that the price which the packer receives for his beef invariably reflects this depression of the price of his raw material. He has no control over the one price or the other; both are governed by supply and demand.

EXPORTS OF PROVISIONS

Exports of hog products for the week ending February 10, 1906, with comparative tables:

PORK, BARRELS.

	Week Feb. 10, 1906.	Week Feb. 11, 1905.	Nov. 1 to Feb. 10, 1906.
United Kingdom	1,179	1,201	16,245
Continent	1,370	730	11,712
South & Cen. Am.	604	912	6,180
West Indies	1,843	2,514	25,297
Br. No. Am. Col.	96	259	9,358
Other countries	24	18	456
Totals	5,125	5,634	60,286

BACONS AND HAMS, POUNDS.

	United Kingdom	Continent	South & Cen. Am.	West Indies	Br. No. Am. Col.	Other countries
United Kingdom	13,068,357	13,062,660	164,178,086			
Continent	4,537,593	1,010,244	43,004,214			
South & Cen. Am.	103,075	128,975	946,182			
West Indies	276,465	393,525	5,234,449			
Br. No. Am. Col.				25,500		
Other countries					913,655	
Totals	18,899,890	14,679,304	214,302,086			

LARD, POUNDS.

	United Kingdom	Continent	South & Cen. Am.	West Indies	Br. No. Am. Col.	Other countries
United Kingdom	8,426,236	7,673,113	97,188,298			
Continent	8,171,066	6,161,274	139,508,668			
South & Cen. Am.	384,237	403,145	7,278,733			
West Indies	1,256,980	1,088,040	15,124,961			
Br. No. Am. Col.	1,200	2,630	223,725			
Other countries	37,070	57,280	757,060			
Totals	18,277,395	15,385,482	260,081,445			

RECAPITULATION OF WEEK'S EXPORTS.

From—	Pork, barrels.	Bacon & Hams, lbs.	Lard, lbs.
New York	4,040	9,476,525	10,669,340
Boston	170	5,699,500	3,018,029
Portland, Me.		784,400	207,700
Philadelphia	281	462,738	1,047,285
Baltimore	307	467,837	1,122,223
New Orleans		274,400	500,105
Galveston		9,640	653,015
St. John, N. B.		1,626,450	653,290
Newport News	327		175,321
Mobile		88,400	231,100
Totals	5,125	18,899,890	18,277,395

COMPARATIVE SUMMARY.

	Nov. 1, 1905.	Nov. 1, 1904.	
	to Feb. 10, 1906.	to Feb. 11, 1905.	Increase.
Pork, lbs.	13,857,200	10,358,000	3,499,200
Bacon & hams, lbs.	214,302,086	184,223,444	30,078,642
Lard, lbs.	260,081,445	175,911,881	84,169,564

OCEAN FREIGHTS.

	Liverpool, Per Ton.	Glasgow, Per Ton.	Hamburg, Per 100.
Canned meats	10/	15/	24c.
Oil cake	8-9	15/	14c.
Bacon	10/	15/	24c.
Lard, tierces	10/	15/	24c.
Cheese	20/	25/	2M
Butter	25/	30/	2M
Tallow	10/	15/	24c.
Pork, per barrel	1/6	2/6	24c.
Beef, per tierce	2/6	3/	24c.

EXPORTS SHOWN BY STEAMERS.

Following were the exports of commodities from New York to foreign ports for the week ending Saturday, February 10, 1906, as shown by Lunham & Moore's statement:

Steamer.	Destination.	Oil Cake.	Cheese.	Bacon.	Butter.	Beef & Bbls.	Pork.	Lard Tcs. & Pkgs.
Campania, Liverpool		753	1495	2215	46	...	187	150
Teutonic, Liverpool		169	2804	1468	204	...	181	260 4606
Canada, Liverpool		977	500	1250	201	...	45	283 625
*St. Louis, Southampton		400	500	1250	20	...	10	475 1165
Minneapolis, London		550	4200	20	...	...	10	475 7960
Brooklyn City, Bristol		680	21	...	...	40	...	6200
Toronto, Hull		310	1089	...	132	...	135	642 15375
Columbia, Glasgow		1027	...	127	...	...	...	265 900
IPatricia, Hamburg		1222	...	239	1762	348	1142	19756
Kaiser Wil. der Grosse, Bremen		25	...	13	450	...	...	530
Rhein, Bremen		363	...	...	1451	...	140	1475
Noordam, Rotterdam		8991	275	...	...	225	...	3100 1575
Tapton, Rotterdam		6869	758	...	72	...	235	655 9000
Finland, Antwerp		335	...	15	...	47	17	945
St. Cuthbert, Antwerp		300	...	75	...	125	...	455 600
Kyoto, Baltic		245	50
La Gascogne, Havre	
Monte Video, Barcelona		895	25	...	...	25	...	225
Roma, Marseilles		10	...	50 450
Prinz Adalbert, Mediterranean		15	...	15	40	50 525
Koenigin Luise, Mediterranean		30	...	255 2030
2Georgia, Mediterranean		100	62
Nord America, Mediterranean		50	300
*Perugia, Mediterranean	
Total		31376	1632	11556	9133	1094	4108	1228 8559 64129
Last week		57339	1165	12031	5800	2390	1595	1747 14968 67643
Same time in 1905		4710	1947	10738	...	561	1169	881 5792 78107
Last year's tallow, 75 bbls., 200 tcs., 240 hhdls.		1—60 tcs. and 35 bbls. tallow.	2—200 tcs. tallow.

*Cargoes estimated by steamship companies.

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TALLOW, STEARINE, GREASE and SOAP

WEEKLY REVIEW

TALLOW.—There has been this week hardly a new feature to the market, which remains fairly steady, with the moderate business at essentially the prices that prevailed in the previous week.

The whole position is a waiting one, and while it may be said that the beef fat markets are depending more than usual upon their direct features for support or otherwise of prices, the fact remains that the lard market will be the keynote for a recovery or further depression in the tallow position.

This will be essentially the outcome in influences from the fact that there is required more than soapmakers' demands to recover tone to the tallow position, in view of the fact that there is now no prospect of material export demand, and that there will be needed home compound makers' demand as well as those from the soapmakers to prevent an accumulation of the tallow supply that would throw the market more in the buyers' favor.

It is true that the compound makers are distributing a good deal of compound lard, but it is on old contracts, against which they have ample supplies of the raw materials, and that new demands for the compounds are light.

Consequently the compound makers are just now, very little interested in buying the beef fat or cottonseed oil materials, and this mood will not change until the lard market gives stronger signs than it does at present of a permanent advance.

The fact that upon some one day the prices of lard become stronger, means little, since it is the outcome of a moderate supply of hogs at the packing points, or some hog cholera

scare from one or two States. It is hard to believe that the lard market is yet ready for permanently higher prices, in view of the understanding that with cold weather over the West the hog supplies would be much more freely than latterly shipped out of farmers' hands to the packing points.

The beef fat markets, therefore, are depending and must further depend for a while chiefly upon soapmakers' demands, and it is doubtful if these will prove sufficient to support prices. We think that the leaning of the market is rather more in favor of buyers.

Upon our Eastern markets there is not, as yet, any marked accumulation of supply, since the city hogshead tallow had been well sold ahead, while that the country made tallow is arriving only moderately and could not very well pile up in supply even with the conservative demands for it.

The New York city hogshead tallow last sold at 5½c. and is now nominally at that price, and New York city tierces would bring 5½c., but held for a little more money. But it is hard to get a bid over 5c. for city hogshead. Weekly contract deliveries of city hogsheads were made at 5½c.

The country made tallow ranges in price from 5½@5½c., but most sales taking place at 5½c., and 200,000 pounds sold altogether within the range. There are some choice lots, covering kettle, at 5½@5½c.

The edible tallow is slow just now and there are some lots from second hands reported as offered at a lower price than we quote, or from 5½@6c. for out of town make. The offerings of New York city edible are small and are at a somewhat nominal price.

The London sale on Wednesday hardly indicated anything of a substantial order. There were only 600 casks offered, yet at the same time only 300 casks were sold, and the prices for it were cabled as essentially as in the previous week.

The Western markets have had only, for the week, a moderate degree of activity, as mainly on soapmakers' wants, with the prices made not showing marked variation, but where there is a gradual increase of supply of the under grades.

OLEO STEARINE.—The market has been slow for the week, with the prices supported to the basis before made from the fact that the Eastern markets at least are making de-

liveries upon contracts and have not a burdensome supply, while up to the present time hope is held among the pressers of a permanently recovered lard market for larger demands for compound lard than can be had at present.

However strong the lard market may be after a while there is not, in our opinion, a promise for its being materially more in the sellers' favor for the near future.

Quotations for the stearine are 7½c. in New York and 7½c. in Chicago. Sales of 50,000 pounds in New York at 7½c. and about 150,000 pounds in Chicago at 7½c.

LARD STEARINE.—There is little buying interest, as the refined lard new trading is now quiet. About 8½c. quoted.

GREASE.—Market is slacker and rather more in the buyers' favor, with diminished demands from home sources which are holding fair stocks. The export interest is moderate. Yellow, at 3½@4½c.; brown, at 3½@3½c.; bone, at 4½@4½c.; house, at 4½@4½c.; choice white, at 6c.; "B" white, at 5@5½c.

GREASE STEARINE.—Only moderate stocks and sufficient demand to support prices. Yellow at 4½@5½c., white at 5½@5½c.

CORN OIL.—The late advanced prices are held firmly, with trading chiefly on home account. Car lots quoted at \$4.50 and job lots to \$4.75.

OLEO OIL.—Further decline in prices on indifferent buying of the Dutch markets and larger competing foreign fat outputs. Rotterdam quotes at 58 florins. New York quotes extra at 10c. and the prices are down to 7@7½c. for low grades.

NEATSFOOT OIL.—Trading is in small lots and of a moderate order at generally steady prices. Quotations: 20 test at 85c., 40 test at 60c., 30 test at 80c., prime at 48c., dark at 40c.

LARD OIL.—There are somewhat increased demands from the manufacturing interests; prime at 65@67c.

COCONUT OIL.—Market has fairly good support under a liberal consumption and the tone of the foreign advices. Cochin quoted at 7½@7½c., and March to April shipments at 7½c.; Ceylon, spot, at 6½c., and shipments at 6½@6½c.

PALM OIL.—Small stocks keep prices steady on the light demands. Red quoted at 5½@5½c., Lagos at 6½c.

COTTONSEED STEARINE.—The productions are closely sold to foreign markets at variable prices as to quantity.

PRODUCE EXCHANGE NOTES.

Visitors: V. Petersen, Copenhagen; J. Feyret, Bordeaux; F. C. Bevan, Malaga; E. M. B. Archibald, Montreal; Maurice Pincoffs, R. B. Schroeder, H. J. Patten, Chicago.

Nathaniel L. Carpenter was proposed for membership.

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MEAT TRADE OF FOREIGN NATIONS.

(Concluded from page 16.)

All but a small part of the meat animals imported into Spain during the past ten years came from Portugal; France and Morocco supplied nearly all the rest. Animal fats formed more than one-half the value of the packing-house products imported into Spain in 1904, the countries of origin being Argentina, France and the United Kingdom. The largest part of the sausage casings comes from the United States. Very little meat is imported, and most of it consists of jerked meat from Argentina.

Animal Fats in Italy.

The value of meat animals and packinghouse products imported into Italy increased from a yearly average of \$4,200,000 during 1895-1897 to an average of \$5,900,000 during 1902-1904. The meat animals constituted less than one-sixth of these imports, and of the packing-house products only a small part consists of meats; two-thirds of the value was due to lard, fats and fatty acids. For the last three years the shares of the United States and Argentina were about equal in this trade, both together contributing 52 per cent. of the packinghouse products imported into Italy. Nearly all the bacon imported during 1895-1904 came from the United States.

Russia being primarily an agricultural country and the Russian people consuming very small quantities of meat, the imports of meat animals and packinghouse products are very small and do not show any marked tendency to increase. For the past few years Asia has been the main source of the live animals imported. On the other hand, imported packinghouse products come in mainly across the European frontier, the United Kingdom supplying 50.2 per cent., evidently re-exports, during 1901-1903, while Germany contributed 17.7 per cent. Animal fats constituted the chief of these products, equaling 80.9 per cent. of the total for the three years. About three-fourths of the fats came from the United Kingdom and one-eighth from Germany. The direct share of the United States in this trade is insignificant, the average annual imports from this country during 1901-1903 being only \$130,000.

Norway Receives Little From Us.

The value of meat animals imported into Norway during 1902-1904 averaged \$494,000 a year, nearly all of the animals coming from Sweden. Packinghouse products increased from a mean yearly value of \$3,068,000 during 1895-1897 to \$4,040,000 during 1902-1904. Of these articles imported during the last three years named, 43 per cent. consisted of tallow and oleo oil, 22 per cent. of pork, and 18 per cent. of other meat. The pork imported into Norway comes chiefly from Germany and Denmark and consists largely of unsmoked meat. Receipts of pork from the United States in 1902-1904 averaged \$142,000 a year.

The market for good United States hams, such as find ready sale in some other European countries, has not been developed in Norway. Since 1898, when 520,000 pounds were received, imports of hams have continued to decline.

Germany and Denmark are the most important sources of the packinghouse products imported into Sweden. Large quantities of pork, tallow and fats come from both these countries, while smaller quantities of the same

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"COTTONOIL," Louisville.CODES USED: { Private, Twentieth Century, A. B. C.
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articles are shipped from the United Kingdom. The Danish pork is crowding out the British pork. Thus, while the imports of pork, other than smoked, from the United Kingdom have decreased from a yearly average of 4,857,000 pounds during 1895-1897 to 1,972,000 pounds during 1901-1903, the imports from Denmark have increased from 307,000 to 2,609,000 pounds. The share of the United States in the imports of packinghouse products is very small, the only item credited to this country during 1901-1904 being about 17,000 pounds of pork, valued at \$1,606.

Cattle and Lard for Cuba.

One-half of the value of meat animals and packinghouse products imported into Cuba during the year ending June 30, 1904, consisted of cattle. These came chiefly from Venezuela, the United States, Mexico, Colombia and Honduras, the first named country sending 118,000 and the second country 115,000. The total imports during this time were 387,000. The packinghouse products imported during the year just mentioned were valued at \$6,000,000, of which nearly one-half was due to lard received from the United States. The largest item among the meats imported was jerked beef from Argentina, valued at about \$2,000,000. In addition to lard the United States was the source of imports of cured pork worth over \$1,000,000 and of smaller amounts of other kinds of meat.

Raw fats and the manufactured ones—oleomargarine and oleo oil—are the principal imports of packinghouse products into Denmark. About two-thirds of the finished product of oleomargarine comes from the Netherlands, and this is probably made of American oleo oil. In the imports of large quantities of cured pork, hams, etc., Sweden shares equally with the United States, and of the quantity of these more than five-sixths is re-exported. The imported prepared beef comes mainly from the United States, and a considerable part of it is forwarded to other countries. Imported live meat animals seem to be destined for the home market, and all come from Sweden.

SAD TALE OF SPOILED PIGS' FEET.

Here is a tale of woe sent in by United States Consul Grout, of Valetta, Island of Malta, regarding American meat shipments which arrive abroad in bad condition. He says:

"Very few things in consular work discourage a consular officer more than, after having induced a merchant of his district to deal with an American house, to see the first or experimental order resulting therefrom arrive at its destination in an unsatisfactory condition. I have had many conversations with a prominent merchant here relative to American firms and goods. Recently this merchant secured a contract to supply a large naval canteen located here with, among other things, pigs' feet. In pursuance of the contract, an order for quite a number of tierces of pigs' feet was sent to a certain American house for shipment to be made at once. Cash was paid in advance. After a while the pigs' feet arrived, having been delayed by transhipment. Upon opening the first tierce the contents were found to be in an almost putrid condition.

"An examination of the remaining tierces revealed them to be in like condition. Had they been provided to the canteen, beyond any doubt the merchant would have lost his contract, meaning much profit to him. As it was, the merchant, in order to fulfill requirements, was obliged to go to a local dealer to purchase a tierce for immediate demands from the canteen. This tierce, upon examination of the outside marks, was found to be from the same American concern that had shipped the first mentioned lot, but upon being opened was found to be perfect in every way.

"Local health authorities have condemned the tierces in question as being unfit for use as food for human beings. The matter of return of purchase money is now between the buyer and seller. Some of our firms are rather stiff as regards requirement of payments in advance on foreign shipments and it seems as if, when these terms are complied with, the goods at least might be sent as guaranteed. As a rule, American goods arriving here are found to be up to the mark, but such an instance as above quoted, even though exceptional, does not help our trade and reputation. Such carelessness, if carelessness it was, should be regarded as unparable in business."

Need a good man? Keep an eye on page 48.

COTTONSEED OIL

WEEKLY REVIEW

THE NATIONAL PROVISIONER is an official organ of the Interstate Cottonseed Crushers' Association, and the official organ of the Oil Mill Superintendents' Association of the United States.

Slight Change in Prices to an Easier Basis—Slack Undertone—Continued Slow Export Demands—Reserved Buying Interest of Compound Makers—Market Awaits Developments of Crude Oil Position and Lard Markets.

The changes in prices through the week for cottonseed oil have been of rather an unimportant character, with early in the week a slightly easier, followed by further weakness, with the later more easier feeling as to prices influenced by the dullness of demand, yet that some new features connected with the lard market, in the hog cholera reports and a not large receipt of the hogs at the packing points, with higher prices for them, should exert a more decided influence upon cotton oil, since the oil is of very reasonable value compared with the situation of the pure lard market. But the cotton oil market is a conservative one on demands from exporters and home consumers, and as it awaits even more pronounced situations of some other markets, and which are more specifically alluded to in this review. At this writing (Thursday) the feeling as to prices of the cotton oil continues weak.

From the present conditions of demand for cottonseed oil, outside of those on speculation, its market position would be a tame one, and if the lard market does not hold the firmness, which it has, at this writing, the cotton oil prices are likely to be influenced by their more direct influences of slow demands, and which are of rather a weakening order.

There is the fact that there is the ordinary amount of crude oil held awaiting more important demands than can be had just now for it, and that the seed receipts, in the Southeast sections, of course only, are of fair volume for this season of the year, by which the productions are steadily adding to held supplies of the crude oil, and chiefly by reason of the

actual needs of the seed for the make of the meal for contract deliveries, rather than that new demands for the meal are of an especially large or urgent order. There is the fact of the slow buying interest for the oil which counteracts at present any other favorable factor.

Even the speculation in the oil is of a more restricted character, although that there is no disposition among the holders of the May and July deals to quit holdings, but rather the feeling among them is to wait developments, except that, at this writing, there is a little pressure to sell the July delivery.

As the holdings of the oil on speculation of the nearer options are not particularly large, there is not likely to be any very marked liquidation in the near future, even if a spirit for liquidation should be among the contingencies for some time next month of the later options or of May and July, but which would, of course, depend upon the possibilities of crude oil supplies and as to how the lard market may show itself. The impression is that the lard market will, ultimately, be higher, or over 8c., however it may be held from advancing further just now, and that it is likely to be moderately lower before it is higher.

The linseed markets of Europe have been declining almost steadily in a small degree, and it is the result largely of a before strained market for the seed and the desire of second-hand holders to unload. Besides the linseed market suffers a little from the fact that the crushers can be somewhat independent in buying it, as there are large stocks of the oil in the leading English and French markets. The statistical position of the linseed would, under ordinary conditions of demand, favor the selling interests, but the market is passing through a period of distrust, as following the late excitement in it, and it will take a little time to cipher upon it in a more decided way.

The world's shipments of the linseed from January 1 have been 577,500 quarters, of

which 312,000 quarters to the United Kingdom and 265,000 quarters to the Continent. The total shipments of the linseed same time in 1905 were 689,500 quarters and in 1904 533,500 quarters.

The indications as to the supplies of the linseed for this year do not point to more than a supply that is usually needed, but it is a fact that, just now, the consumers of the seed feel like waiting, in buying, particularly as they are holding good stocks of the oil.

This position of the linseed market is indicative of the indifference that prevails among foreign markets in buying the soap grades of the cotton oil.

It is true that some of the foreign markets are holding less than their usual stocks of cotton oil, and that they must, at some time before May, become buyers, at least moderately, of the cotton oil.

But, just now, the foreign markets are, in some degree, substituting in use the other oils from cottonseed oil for soapmaking, particularly as they have been bad, latterly, at lower prices, and, as well, as the late decline in linseed makes its price nearly as cheap as that for the English cottonseed oil, and cheaper than the American cotton oil, with the lay down cost from this country or from England, of course as taken in consideration, and the fact that the linseed price is quoted, packages included, while the Hull (England) cottonseed oil price does not include the package and is for naked oil.

The cottonseed oil market of England which had, a few days since, been influenced to firmness by the tone of the markets in this country, has since weakened, while it has lost about all of its recent advanced prices, partly because of the slower and tame markets in this country, but, as well, from the fact that the Egyptian cottonseed has been had at lower prices. Besides, the consumption of the cotton oil upon the English markets has, tem-

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Cotton
Oil Co.



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MEAL, HULLS.

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AWARDED:

Chicago, 1893. San Francisco, 1894.
Atlanta, 1895. Paris, 1900.
Buffalo, 1901. Charleston, S. C., 1902.
St. Louis, 1904.



Wouldn't it be to your advantage to buy cotton-seed oils from one of the largest houses of this kind in the world?

Could our business be so big if our oils were not always up to grade and uniform --- if our prices were not right --- if our facilities were not the best --- if our service were not prompt and satisfactory?

Let your own experience answer these questions.

A trial order will prove that your experience has not misguided you.

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Our products, under the following brands, are kept in stock, in large quantities, in twenty-one cities all over the globe:

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"APEX"—Prime Summer Yellow Oil

"HULME"—Choice Winter White Oil

"NONPAREIL"—Choice Winter Yellow Oil

"WHITE LILY"—Prime Summer White Oil

"EXCELSIOR"—Summer White Soap Oil

(Our "SNOWFLAKE" is unequalled for cooking purposes)

ASK FOR PRICES

Kentucky Refining Co.,

Louisville, Ky., U. S. A.

porarily, slightly diminished by reason of the position of the linseed market. The little demand which had prevailed from England for the cottonseed oil in this country has been quieted and is now practically unimportant.

The edible grades of the cotton oil in this country have had, for a few days, but little attention from the foreign markets. In an all around way the export demands for the oil here are very slack. The reason for the slow buying interest for the edible grades of the cottonseed oil is found in the declining market for the oleo oil, and the general desire to wait for settled market conditions for all oils from their present dragging tendency. The price of the oleo oil is down to 58 florins, and it is accumulating in supply, even at this price, which is 3 florins lower for a period of about ten days. This decline in oleo oil occasioned more by the increased productions of it by the foreign markets themselves, and not from any decreased business in butterine in the Dutch markets, the consumption of which is well up to the season's average volume of it, and is likely to continue so until dairy products are had freely in the spring season.

But we expect to see more normal markets for the oleo oil, after the held back livestock supplies of Europe have been marketed, and there is now a beginning of marketing of them, after which there would necessarily be a resumption of more active export demands, for Rotterdam particularly, for the oleo oil in this country, and at which time the edible grades of the cotton oil would revive in buying attention, since, unquestionably for the season, however quiet the foreign demands are now, nearly as much of the edible cotton oil will be required by Europe from this country, particularly by Rotterdam, as was had by it last year.

The cotton oil markets, and many of the allied oil and grease markets, as excluding the linseed market, depends in a good degree, for their positions upon the attitude of the lard market, actual and probable.

It is a fact that there has been nothing latterly in the tone of the lard market to warrant confidence of permanently further advanced prices, although the belief is that lard will find after a little while an even higher range of prices. A further shooting up of lard prices would encourage the compound makers' consumption of cotton oil, and by which its market would be benefited.

Just now the lard prices are hardening some and have made a moderately better range of prices, and chiefly on reports that are being circulated of hog cholera in Nebraska and Kansas, with a large number of hogs reported as lost and because, as well, of the higher prices for hogs. But the lard prices are not, for the near future, likely to hold firm.

From statistical positions of the lard it could easily go, as we have for some time implied, to a decidedly better line of prices. It has been a question only as to whether the time is ripe for higher prices of the lard of a stable order, and it may be doubted that it is so and from the fear that the hog supply is freely back in farmers' hands yet to be marketed, although that it is improbable that the hog supply held back is as large, however liberal it is, as had been supposed by some trade sources it was earlier in the season.

A prolonged spell of cold weather would more clearly show the extent of the hog supply since it would start it forward to market, par-

ticularly as current prices for the hogs are highly profitable to the farmers. But until this hog supply is more freely gathered in by the packers, it would be hard to understand that the hog products markets would be allowed to drift materially higher, however temporarily their markets may get an advantage from "hog cholera scare" or from the hog market position of prices. It strikes us that when the lard markets get in shape for permanently stronger prices that at that time the cotton oil market will have a more assured position, since it would be the beginning of more active demands for the cotton oil from home sources, and directly and indirectly affect products that would improve, in some degree, export demands for the cotton oil.

New York Transactions.

The market at the close of the week before stood for prime yellow, on the "call," February, 31 1/2@32 1/4c. and 31 1/2@32c.; March, 31 1/2@32c.; May, 32@32 1/4c.; July, 32 1/4@32 1/4c. and 32 1/2@32 1/4c.; September, 33@33 1/2c. Sales, 3,400 bbls. July, 32 1/2c.; 600 do., 32 1/2c.; 200 bbls., February, 32c.; 600 bbls. March, 31 1/4c.; 1,200 bbls. May, 32c.

Monday—Holiday.

On Tuesday the market opened slightly firmer, but closed easier. Sales: 400 bbls. prime yellow, February, 31 1/4c.; 200 bbls. March, 31 1/4c.; 1,800 bbls. May, 32c.; 500 bbls. do., 31 1/4c.; 900 bbls. July, 32 1/2c. "Call" prices: February, 31 1/2@32 1/4c. and 31 1/2@32 1/4c.; March, 31 1/4@32 1/4c. and 31 1/2@32c.; May, 31 1/4@32 1/4c.; July, 32 1/4@32 1/4c.; September, 32 1/4@33 1/2c., and later in the day a weak and 1/4c. lower market. Sales: 100 bbls. February, 31 1/4c.; 100 March, 31 1/2c.; 400 May, 31 1/4c.; 100 do., 31 1/2c.; 500 July, 32 1/2c.; 500 do., 32 1/4c. Last "call" prices: February, 31 1/2@32c.; March, 31 1/2@32c.; May, 31 1/2@32c.; July, 32 1/4@32 1/4c.; September, 32 1/4@33 1/4c.

On Thursday the opening was weak and about 1/4c. lower. Afterwards there was barely further change. Sales then 100 bbls. prime yellow February, 31 1/4c.; 3,200 May, 31 1/4c., and 100 July, 32 1/4c.; fully 4,900 do., 32c. "Call" prices: February at 31@31 1/4c.; March at 31@31 1/4c., and 31@31 1/2c.; May at 31 1/4@31 1/4c. (afterwards offered at 31 1/4c.); July at 32@32 1/4c. afterwards offered at 32c.); September at 32 1/2@33c.

Export Demands.

There have been about 2,000 bbls. edible oils sold for Europe at 34@35c. and small lots of prime yellow on spot at 32c. But, on the whole, the export demand is lifeless. The price of linseed in London, at this writing, is 4s., a decline of 1s. 3d. for the week, and for linseed oil the price is 20s. 7 1/2d., which is 7 1/2d. lower for the week. The Hull (England) price for cottonseed oil is 19s. 3d., for loose oil, which is down 1 1/2d. for the week.

(Continued on page 42).

The Procter & Gamble Co.

Refiners of All Grades of

COTTONSEED OIL

Aurora, Prime Summer Yellow
Boreas, Prime Winter Yellow
Venus, Prime Summer White

Marigold Cooking Oil
Puritan Salad Oil
Jersey Butter Oil

Cable Address
Procter, Cincinnati, U. S. A.

Office, CINCINNATI, O.
Refinery, IVORYDALE, O.

Compound Makers' Demands.

While there is a large consumption of compound lard, it is satisfied by the distributors from the contract deliveries to them, and new demands upon the makers are small. Therefore there is unimportant inquiry from the compound makers for cotton oil, which is offered them at a decline to 30c. in tanks at the West, while the bidding is hardly better than 29c., and there are reports of sales at the West at 29c.

At the Mills.

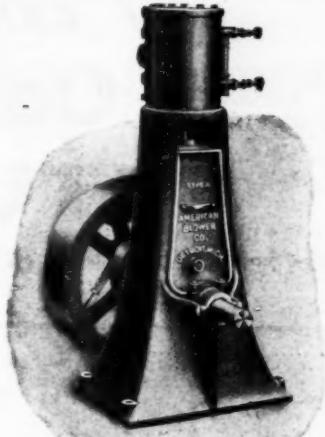
There is a slack look to the markets for the crude oil, with bidding not better than 24½c., in tanks, and some sellers at that, with 20 tanks in lots sold at 24½c. But most holders of the crude oil refrain from pressing a market. Still later crude is offered more freely at 24½c., with 24c. bid, and sales in Texas at 24@24½c., and in the Southeast at 24½c. for 15 tanks.

COTTONSEED OIL EXPORTS

Exports of cottonseed oil for the week ending Feb. 15, 1906, for the period since September 1, 1905, and for the similar period in 1904, were as follows:

From New York.

Port.	For week, 1, 1905.	Since Sept. 1, 1905.	Same period.
	Bbls.	Bbls.	Bbls.
Alesund, Norway	125	—	—
Aberdeen, Scotland	60	50	—
Acajutla, Salvador	12	25	—
Adelaide, Australia	—	58	—
Alexandria, Egypt	45	2,749	1,673
Algiers, Algeria	100	2,571	3,531
Algoa Bay, Cape Colony	238	22	—
Ancona, Italy	150	425	—
Antigua, West Indies	645	76	—
Antwerp, Belgium	5,150	1,481	—
Asuncion, Venezuela	—	49	—
Auckland, New Zealand	65	47	—
Bahia, Brazil	417	656	—
Barbados, West Indies	389	610	—
Barcelona, Spain	—	50	—
Belfast, Ireland	133	25	—
Bergen, Norway	—	150	300
Berlin, Germany	—	12	—
Bone, Algeria	81	360	—
Bordeaux, France	2,095	2,395	—
Braila, Roumania	175	—	—
Bremen, Germany	5	205	—
Bridgeport, West Indies	36	315	—
Bristol, England	—	10	—
Buenos Ayres, Argentine Rep.	1,143	1,054	—
Calabar, Cuba	54	10	—
Callao, Peru	40	—	—
Cairo, Egypt	90	—	—
Campeche, Mexico	42	—	—
Cape Town, Cape Colony	1,238	406	—
Cardenas, Cuba	5	84	—
Cardiff, Wales	100	10	—
Cartagena, Colombia	3	4	—
Carenne, French Guiana	129	151	—
Christiania, Norway	930	526	—
Christiansand, Norway	50	—	—
Cienfuegos, Cuba	165	—	—
Ciudad Bolivar, Venezuela	40	9	—
Colon, Panama	303	340	—
Connakry, Africa	20	194	45
Copenhagen, Denmark	645	2,489	—
Corinto, Nicaragua	71	110	—
Curacao, Leeward Islands	41	—	—
Dantzig, Germany	1,500	2,200	—
Delingon Bay, East Africa	9	21	—
Demerara, British Guiana	855	657	—
Drontheim, Norway	100	23	—
Dublin, Ireland	—	76	—
Dundee, Scotland	65	25	—
Dunkirk, France	810	200	—
East London, Cape Colony	—	125	—
Flume, Austria	365	2,000	—
Fort de France, West Indies	—	1,410	—
Fremantle, Australia	—	58	—
Galati, Roumania	1,215	750	—
Genoa, Italy	5,965	17,652	—
Georgetown, British Guiana	10	124	—
Gibraltar, Spain	1,607	303	—
Glasgow, Scotland	3,197	2,960	—
Gothenburg, Sweden	845	1,456	—
Grand Bassam, W. Africa	10	—	—
Grenada, Spain	11	—	—
Guadeloupe, West Indies	631	1,304	—
Guantanamo, Cuba	22	—	—
Guayaquil, Ecuador	59	45	—
Half Jack	—	4	—
Hamburg, Germany	3,490	2,397	—
Havana, Cuba	160	1,819	832
Havre, France	200	10,689	16,714
Helsingborg, Sweden	28	—	—
Helsingfors, Finland	50	—	—
Hong Kong, China	—	54	—
Hull, England	115	225	—
Jaemel, Haiti	—	3	—
Kingston, West Indies	13	1,546	1,453
Kobe, Japan	1,598	—	—
Konigsberg, Germany	600	900	—
Kustendil, Roumania	75	—	—
La Guaira, Venezuela	65	530	—
Leghorn, Italy	657	5,142	—
Leith, Scotland	70	50	—
Lisbon, Spain	—	26	—
Liverpool, England	3,067	2,717	—
London, England	2,530	1,390	—
Macarao, San Domingo	413	1,056	—
Total	3,771	190,536	183,378
From New Orleans.			
Antwerp, Belgium	200	6,100	4,450
Belfast, Ireland	—	275	450
Belize, Br. Honduras	—	27	—
Bremen, Germany	—	3,143	1,433
Christiania, Norway	—	450	—
Copenhagen, Denmark	—	6,143	1,105
Dunkirk, France	—	500	—
Genoa, Italy	—	100	301
Glasgow, Scotland	—	1,025	2,698
Hamburg, Germany	—	14,030	8,453
Havana, Cuba	—	642	921
Havre, France	100	2,165	1,110
*Not given.			
From Newport News.			
Glasgow, Scotland	420	420	—
Hamburg, Germany	4,326	13,948	7,320
Liverpool, England	—	900	145
London, England	—	9,126	6,127
Total	4,746	24,503	14,992
From All Other Ports.			
Canada	776	6,496	5,473
Germany	—	400	—
Guatemala	—	8	—
Honduras	—	5	—
Liverpool, England	—	10	21

Lubricated Without Oil Pressure
By Pump and Gravity Feed

(Patented.)

American Blower
Company, DetroitNew York, Chicago,
Atlanta, London

From Galveston.

Antwerp, Belgium	—	2,680
Copenhagen, Denmark	—	100
Glasgow, Scotland	—	201
Hamburg, Germany	—	3,000
Liverpool, England	—	480
Marseille, France	—	3,350
Rotterdam, Holland	500	20,468
Tampico, Mexico	—	6,822
Trieste, Austria	—	4,500
Venice, Italy	—	50
Vera Cruz, Mexico	—	100
Total	1,200	116,101
From Baltimore.		
Antwerp, Belgium	—	2,680
Bremen, Germany	260	648
Bremerhaven, Germany	—	260
Copenhagen, Denmark	—	805
Glasgow, Scotland	—	170
Hamburg, Germany	—	2,810
Havre, France	—	100
Liverpool, England	—	80
Rotterdam, Holland	—	2,581
Stettin, Germany	—	530
Total	300	37,991
From Philadelphia.		
Antwerp, Belgium	—	1,206
Bremen, Germany	260	648
Bremerhaven, Germany	—	260
Copenhagen, Denmark	—	805
Glasgow, Scotland	—	170
Hamburg, Germany	—	2,810
Havre, France	—	100
Liverpool, England	—	80
Rotterdam, Holland	—	2,581
Stettin, Germany	—	530
Total	200	7,508
From Philadelphia.		
Coin Island	—	—
Hamburg, Germany	161	—
Rotterdam, Holland	200	6,680
Total	361	6,661
From Savannah.		
Bremen, Germany	3,510	—
Christiania, Norway	433	—
Gothenberg, Sweden	1,067	—
Hamburg, Germany	1,806	—
Havre, France	1,433	—
London, England	375	—
Rotterdam, Holland	15,947	—
Stavanger, Norway	197	—
Trieste, Austria	321	—
Total	25,089	—

Bremen, Germany	3,510	—
Christiania, Norway	433	—
Gothenberg, Sweden	1,067	—
Hamburg, Germany	1,806	—
Havre, France	1,433	—
London, England	375	—
Rotterdam, Holland	15,947	—
Stavanger, Norway	197	—
Trieste, Austria	321	—
Total	25,089	—
From Newport News.		
Glasgow, Scotland	420	420
Hamburg, Germany	4,326	13,948
Liverpool, England	—	1,400
London, England	—	900
Rotterdam, Holland	—	9,126
Total	4,746	24,503
From All Other Ports.		
Canada	776	6,496
Germany	—	400
Guatemala	—	8
Honduras	—	5
Liverpool, England	—	10

ASPEGREN & CO.

Produce Exchange

NEW YORK CITY

EXPORTERS

BROKERS

**WE EXECUTE
ORDERS
TO BUY OR SELL**

Cotton Seed Oil

**ON THE N. Y.
PRODUCE
EXCHANGE FOR**

FUTURE DELIVERY

**Write to us for particulars. Will wire you the daily closing prices
upon request.**

Mexico	2	—
Salvador	—	59
Total	776	6,981

Recapitulation.

From New York.....	3,771	190,536	183,378
From New Orleans.....	1,200	116,101	115,616
From Galveston.....	900	37,991	64,247
From Baltimore.....	200	7,598	6,883
From Philadelphia.....	—	361	6,061
From Savannah.....	—	25,089	—
From Newport News.....	4,746	24,593	14,962
From all other ports.....	776	6,981	5,494
Total	11,253	400,160	397,271

*Not given.

CABLE MARKETS

Rotterdam.

(By Cable to The National Provisioner.)

Rotterdam, Feb. 15.—Cottonseed oil market is very easy. Demand poor. Quote butter oil at 26½ florins; prime summer yellow at 25 florins; off oil at 24 florins.

Antwerp.

(By Cable to The National Provisioner.)

Antwerp, Feb. 15.—Cottonseed oil market is steady. Quote off oil at 50½ francs.

Hamburg.

(By Cable to The National Provisioner.)

Hamburg, Feb. 15.—Cottonseed oil market is weak at 40 marks for off oil, 41½ marks for prime summer yellow and at 43½ marks for butter oil.

Marseilles.

(By Cable to The National Provisioner.)

Marseilles, Feb. 15.—Cottonseed oil market is very weak. No demand at all. Quote prime summer yellow at 50 francs and winter oil at 53½ francs, nominal.

Liverpool.

(By Cable to The National Provisioner.)

Liverpool, Feb. 15.—Cottonseed oil market is fairly steady. Quote prime summer yellow at 20s. 9d.; off oil, 20s. 2d., c. i. f. English ports.

WATCH FOR THE OPENINGS.

Experts in every branch of the packing-house industry can find lucrative employment by keeping an eye on the "Wanted" department, page 48.

SOUTHERN MARKETS

New Orleans.

(Special Wire to The National Provisioner.)

New Orleans, La., Feb. 15.—Crude oil easier at 24c. for Texas, 24½c. for Valley. The majority of mills are holding, expecting a reaction. Cake is dull at \$29.50; meal, \$30, long ton, ship side. Hulls are weaker at \$6.50, loose, New Orleans.

Dallas.

(Special Wire to The National Provisioner.)

Dallas, Tex., Feb. 15.—The oil market is very quiet; sales light. Buyers and sellers are waiting further developments. Oil, 24@ 24½c.; meal, \$29, f. o. b. Galveston. Stocks of oil and meal light. Mills in Texas will be about all through their crush this month.

Atlanta.

(Special Wire to The National Provisioner.)

Atlanta, Ga., Feb. 15.—Prime crude oil, 24½c. Mills are holding firm. Meal, \$24@ 24.50, f. o. b. at mills. Hulls are weak at \$5.20 loose.

Memphis.

(Special Wire to The National Provisioner.)

Memphis, Tenn., Feb. 15.—Cotton oil is quiet; prime crude, 25½c. Prime meal is weak at \$25@25.50. Hulls are dull at \$5@ 5.25, loose.

Kansas City.

(Special Wire to The National Provisioner.)

Kansas City, Mo., Feb. 15.—The market is weaker; sales of prime crude at 24c. in the West, and that is now the top in the Valley. Considerable off quality is now offering.

COTTONSEED OIL SITUATION.

(Special Letter to The National Provisioner from Aspren & Co.)

New York, Feb. 15, 1906.—The same absence of demand has continued during the past week and while offerings have also been very light, they have evidently been sufficient to satisfy whatever demand there was and still cause somewhat of a depression.

There have been rather heavy arrivals of prompt oil here and it has been hard to find an outlet for it. Considerable liquidation of May oil has also kept this option in a rather weak position, and as far as the July option is concerned it has been steadily hammered by one of the concerns which has been selling

large quantities of it right along. All these factors together have brought about the decline of about 1c. per gallon in refined.

While crude oil is easier and not in much demand it must be admitted that there seems to be no special desire to let go of it at the reduced price. Altogether the situation is about the same as last week. Produce Exchange prices at 3:30 to-day were as follows: Prime summer yellow cottonseed oil—February, 31c. bid, 31½c. asked; March, 31c. bid, 31½c. asked; May, 31½c. bid, 31½c. asked; July, 32c. bid, 32½c. asked. We further quote: Prime winter yellow cottonseed oil, 33½c.; prime summer white cottonseed oil, 33½c.; Hull quotation of cottonseed oil, 19s. 3d.

BRITISH MEAT IMPORTS.

Importations of fresh meat into Great Britain for the month of January, as reported by the London Meat Trades Journal, were 413,585 cwt. of beef, against only 277,611 cwt. for the same month of 1905. Mutton imports were 274,265 cwt., compared with 255,367 cwt. a year ago. Pork was imported to the amount of 58,238 cwt. during the month, as against 60,871 cwt. a year ago.

JULIAN FIELD
Broker in Cottonseed Products,
Fuller's Earth and Fer-
tilizing Materials
ATLANTA, GA.

JULIUS DAVIDSON

Broker and Commission Merchant
PACKING HOUSE PRODUCTS
COTTONSEED OIL

302 and 303 Kemper Bldg. Kansas City, Mo.

W. B. JOHNSON & CO.,

Merchandise Brokers

AND DEALERS IN

Cotton Seed Products

32 N. Front Street Memphis, Tenn.

Southern Office and Works: Norfolk, Va.
COTTON OIL & FIBRE CO.
Producers of
**Crude and Refined Cotton Seed Oil, Cotton Seed Cake,
Hulls, Mixed Hulls, Linters, Etc. Prime Cotton Seed Meal "Cofco" Brand.**
Samples free on request Net 100 lbs. fully decorticated.
GUARANTEED ANALYSIS.
Ammonia, not less than 8.50 per cent. Nitrogen, not less than 7 per cent. Protein, not less than 43 per cent. Crude Oil and Fat, not less than 9 to 10 per cent.

Land Title & Law
Philadelphia, Pa.

HIDES AND SKINS

(Daily Hide and Leather Market.)

Chicago.

PACKER HIDES.—The market is dull, but it is thought that there is likely to be no material decline until there is more of an accumulation of February and March native steers and butt brands. Packers are holding fairly steady on native steers, but are not making any sales. They do not consider it good policy to offer their hides down, but there is little doubt but that they would consider reasonable bids on good sized blocks. Bids of 15c. are still being refused for small lots of January native steers and early January alone are not offered at 15½c., although that figure would probably be accepted as well as 15c. for late January. Buyers expect to get February native steers at under 15c. Branded hides continue fairly steady and nominally unchanged at 14½c. for heavy and light Texas, 13½@14c. for extreme Texas and butt brands and 13½c. for Colorados. February branded cows from northern points will not bring over 13½c. owing to an easier feeling in native cows. January heavy and light native cows are offered at 14½c., with no further lots taken. Buyers are not disposed to bid 14c. for January light native cows alone. Bulls unchanged.

COUNTRY HIDES.—Buyers do not show any more inclination to operate than they have for a month past and still think the market weak with a lower tendency as the season advances into March salting. Dealers here, however, claim that a turn has come to the market and prefer to await developments and get their asking prices for hides. These dealers claim that the market is steadier and that bids of 11c. have been declined for all No. 2 buffs that are being held at 11½c. No sales of buffs have been reported in this market and the price continues nominal at about 12c., although many buyers would not bid this figure. Chicago dealers are buying wherever they can pick up what they call bargains at outside points and making little effort to sell. Some prime lots of January heavy cows are held at 12½c., but this price cannot be obtained at present and late receipts are nominally not quotable at better than 12c. Extremes continue very dull and would be difficult to move at over 12c. Heavy steers last sold at 13c. for good lots, but some lots could be bought at 12½c. Bulls are also quiet and quotable at 10½@11c. for No. 1's.

HORSE HIDES.—Some whole hides sold at \$4.10 from an outside point delivered here.

CALFSKINS.—The market continues weak. Chicago city skins are nominally quotable at 15½c. in the absence of sales. The packers are seeking bids on skins they have accumulated. They are asking old prices, but intimate that they are open for offers. Outside city skins are also nominal at 15@15½c. and

countries are not quotable at over 14½c. The last sale of countries was a car at 14½c. delivered here from an outside point. The same dealer offered to sell hiskins at 12½c., but did not move them. Best kips on the market here will not bring over 13c. Deacons rule at 77½@80 and 97½c.

SHEEPSKINS.—The market continues weak, with no further sales reported. Last sales of Chicago nacker sheep were at \$2.02½, and buyers will not bid over \$2 for more. Lambs are held at \$1.00 for Chicago packer take-off, but are accumulating at that figure. The accumulations of western packer pelts and dry pelts continue unsold. Dry pelts range from 19c. and down and nothing salable above 19c. Country pelts are in less demand, but are not as weak as packers. Sales of countries still range all the way from \$1 to \$1.70.

New York.

DRY HIDES.—The balance of the Orinocos here, about 2,000, have been sold at 25c. Other sales include 4,800 Puerto Cabelllos, etc., at 24c., and 1,000 Mexicans at 22c.

CITY SLAUGHTER HIDES.—One packer has made a sale of 3,500 January butt brands and Colorados at 12½c.

COUNTRY HIDES AND CALFSKINS.—No further sales of hides have been reported here and the market is unchanged. Large buyers will not bid over 11c. flat for small lots of New York State cows, but have not secured any further lots since those noted yesterday. Some straight carload lots of New York State cows are obtainable at 11½c., but not taken. Calfskins continue quiet, with light weights particularly easy. New York City 5@7 lb. skins are not wanted for export now at above \$1.20. New York cities are quotable at \$1.25, \$1.70 and \$1.90@1.95. Country skins rule at \$1.15, \$1.50 and \$1.75.

FALSE FOOD IDEAS.

(Concluded from page 14.)
trimmed off, washed off, or that it was soaked prior to cooking.

Borax on hams, shoulders and bacon would prevent flies depositing their germs thereon, less salt would be required, and it would also prevent the meat from shrinking, thus making it sweeter, milder, more nutritious, more edible and easier to digest.

In spite of the adverse criticism of Dr. Wiley, our political chemist, country legislators, the press, etc., the innocuousness of borax and boric acid is absolutely established in England, where they have eaten boraxed foods for a quarter of a century. Statistics show that during the fiscal year 1903-1904 the United Kingdom imported from the United States: Hams, 169,703,849 pounds; bacon, 196,822,713 pounds; total, 366,526,562 pounds. Statistics also show that during the fiscal year of 1904-1905 England imported 407,794,000 pounds of butter, from Australia, New Zealand, France, Norway and Sweden, which was preserved with boric acid. To preserve the hams and bacon it required 6,750,000 pounds of borax. To preserve the butter it required 2,038,970 pounds of boric acid.

In spite of this the Englishman waxed

fat on his borated diet, which proves conclusively, practically and scientifically the innocence of boron preservatives. Such practical experience is absolutely of more value as showing the effects of borax and boric acid on the human system than any tests that have ever been made in any chemical laboratory in the world.

Very truly yours,

E. R. RANDOLPH.
118 East 125th st., New York City.

BOYCOTT STILL ON BORAX.

An inquiry was recently made of the Department of Agriculture at Washington, from an importer of Frankfurter sausages, concerning objection to the use of salicylic or boracic acid or any preservative to keep the meat, if that fact be plainly stated on the label. The German manufacturer, because of objection by the Department of Agriculture, has discontinued using any preservative, and the importer said that the sausages did not keep well without it.

The attitude of the Department of Agriculture was revealed in the following reply:

"The addition of any preservative of any kind to a food product may be objected to, first, when the added body is not mentioned on the label; second, if the added substance itself may be deemed injurious to health; third, the added substance may be forbidden by the laws of the country in which the foods are made or from which they are exported.

"Both boracic and salicylic acids are prohibited by the German laws. Boracic acid has been declared by this department to be injurious to health. It does not appear that there is any convincing reason for the use of any preservatives in sausages, except the usual condimental ingredients—salt, vinegar, spices, and wood smoke. Until the results of experiments conducted in the Bureau of Chemistry are declared, small quantities of benzoic acid and benzoates, salicylic acid and salicylates, sulphurous acid and sulphites, and copper sulphate are permitted in food products when plainly declared upon the label and when not forbidden by the law of the countries where the foods are produced or from which they are exported."

Need a good man? Keep an eye on page 48.

HIDES UP!

after being salted with RETSOF CRUSHED ROCK SALT will bring more money on account of receiving a thorough, honest cure. No lime in RETSOF; just the pure Salt supplied by Nature. We merely crush and screen to meet the requirements. The fact that RETSOF spreads evenly—being dry—causes the hide to be cured uniformly; the Salt can be used several times, thus making it the most economical we know of.

That we are never too old to learn is exemplified by the following: A hide man who had used evaporated Salt for many years was induced recently to put down a pack of 25 hides with RETSOF and a pack of same number with evaporated; when taken up the pack salted with RETSOF had increased in weight 34 lbs. more than the other pack.

If you are skeptical give RETSOF a similar trial, that is all we ask.

Address

INTERNATIONAL SALT CO.
SCRANTON, PENNA., or CHICAGO, ILL.

Country Butchers

Before Disposing of HIDES and SKINS would do well to Write for Prices to

U. S. Leather Co.
Country Hide Department,
E. J. SCHWARZ, Manager

Newark Branch,
Cor. Cross and Spring Sts.,
NEWARK, N. J.

Cleveland Branch,
Cor. James and Merwin Sts.,
CLEVELAND, OHIO.

Cumberland Branch,
CUMBERLAND, MD.

CARROLL S. PAGE, HYDE PARK, VT.

Green Calfskins, Country Hides, Sheep
Pelts, Tallow, Bones.
Wool Puller and
Tallow
Renderer
Manufacturer of
Page's Perfected
Poultry Feed



CHICAGO SECTION



Board of Trade memberships are selling at \$3,075 net to buyer.

Swift & Company's sales of fresh beef in Chicago for the week ending Feb. 10th, averaged 5.95 cents per pound.

The death of Anderson Fowler last week gave rise to many reminiscences among the old-timers in Packingtown.

The National Pure Food and Dairy Show opened at the Coliseum, Thursday, and was largely attended. It will run ten days.

Exhibit "A" at the Automobile Show was the Rev. Chas. A. Meade. Exhibit "B," the Hon. Jerry Ellis. Exhibit "C," The Show.

A punster who, after reading a list of those wedding gifts, asked, "How much is Nicholas Longworth?" has been chased out of town!

The "beef" jury had three days rest—Saturday, Sunday and Monday—closely guarded by Government officers. We will all get a rest after a while or two.

Nelson Morris bought quite a number of pure bred Aberdeen, Angus and Hereford breeding cattle for his Texas ranch at the Dexter Park sale last week.

Mr. Wm. Simpson, commission salesman and offal contractor, No. 13 St. John's Market, Liverpool, England, was a visitor at the Union Stock Yards this week.

Exchanges, banks, schools and municipal offices were all closed Monday, Lincoln's birthday, and Washington's birthday, February 22, will be likewise observed.

Wonder what old Ben Franklin would say to an American ambassador making a wedding present of a dog collar studded with diamonds and with a diamond pendant?

It wouldn't be so bad if these doggoned adulterators would quit adulterating the adulterants. They adulterate the adulterated food stuffs we "move in" but too frequently.

"Twenty-three" (18 and 5) for "Peace to thee" now in Zion City. Also Profit Dowie's job is vacant. "Cap." Streeter cannot qualify, the ceiling not being high enough for his act.

JAMES A. CANNON
1102 Malters Building CHICAGO

Broker in Oils, Tallow, Greases and all Packinghouse Products. X X X Correspondence Solicited

Swift stock does not seem to suffer any on account of the investigation. Evidently the public thinks that the business can run itself and pay dividends and things. Speaks well for the industry as an investment.

There should be a big demand for penitentiary insurance among that New York crowd of widow despilers. Too bad they didn't devise that kind of policy before Doctor Hughes sent their think-tanks to sanitarians for repairs.

The Chicago Grocers' and Butchers' Association gave its seventeenth annual ball and euchre party Thursday evening of last week in the Masonic Temple drill hall. The affair was largely attended and every one had a most enjoyable time, as usual.

"Datto" Bryan says the Japs buy bones and bristles from our slaughter houses, ship them to Japan and return them to us as finished brushes. "Datto" is now trying to find out if the slant-eyed bear-tamers have a method of putting gold plate on silver votes.

J. Ogden Armour recently bought the McCue farm, near Lake Forest, forty-one acres, at \$300 per acre. This land is practically in the heart of the Armour tract, hence the unusual price paid therefor. Most of the adjoining farms were bought around \$100 per acre.

During the reading of the Garfield report in court, one of the three spectators in the court room fell asleep. He tumbled off the bench and startled everybody in the room. It was thought at the time that the government attorneys had "taken a tumble to themselves."

Michael Donnelly has returned, but has nothing to say about his disappearance. He is not the only one who has got lost in Cincinnati. It seems to be mixed with the humidity, soot and other things in the air, and to a person not used to it it's liable to have any old effect.

Soon as the administration has finished up the indicted packers, or vice versa, it will be equally interesting to see a public exhibition of Taft, Cromwell, Wallace, et al. Perhaps this affair will not be quite so publicly exploited, because—well, its none of the public's—biz.

JUTE CLOTH—for pressing tankage and blood.
FINE BURLAPS—for canvassing hams and bacon.
BURLAPS and BAGS—for any purpose.

W. J. JOHNSTON, Manufacturer and Importer
182 Jackson Boulevard, Chicago

A. B. Swift, a son of L. F. Swift, threw a companion whose coat had caught fire out of an automobile at Los Angeles, California, thereby preventing an explosion of the gasoline tank. Then he jumped out and smothered the flames. Nothing anaemic about packers' youngsters!

Armour & Company do not intend to allow any draft horses with "International" qualifications to get past them. They bought a gray gelding weighing close to a ton last week for \$400, the top for the year so far, but considered by good judges an easy figure for the animal in question.

Phil Aaron, the deservedly popular Western Electric's man-and-a-half, will shortly leave for Seattle to take charge of his company's business there. Besides there being a big hole left in the atmosphere (Phil's displacement is quite a trifle) there will be a large-sized vacancy in a whole lot of people's "good old pal" list when he's gone.

J. M. Doud, a Chicago livestock commission man, is reported as having made the following statement before the Corn Belt Meat Producers Association at Des Moines last Tuesday: "The privileges which commission firms allow to speculators in crippled stock who work for the commission firms, but receive their pay in favors, is the avenue through which stolen hogs are marketed, making possible such acts as changing light for heavy hogs and feeding corn for themselves and charging it to the shippers."

Several rendering plants have violated the ordinance passed last April requiring the installation of automatic thermometers, and in consequence are liable to be fined from \$25 to \$200, or have their licenses revoked. The concerns are: Louis Pfaelzer & Sons, 4170 Emerald avenue; F. L. Umbach, 3929 Halsted street; Standard Slaughtering Company, Fortieth and Butler streets; Hibernian Banking Association, receivers for Hoff & Brennan, Forty-first street and Emerald avenue; David Levi & Company, Union Stockyards; Fitzpatrick Brothers, Thirty-second place, near Fox street; John Fitzpatrick & Company, Twenty-eighth street and Western avenue; McGurl Brothers, Thirty-first street and Western avenue.

Bargains in equipment can be secured if you will consult page 48 each week.

ZACHARY T. DAVIS
ARCHITECT
79 Dearborn Street CHICAGO

Packinghouses a specialty. Eight years supervising architect with Armour & Co.

PUT THIS IN YOUR CARD INDEX

Mr. A. Says—"I built my plant on plans furnished free (?) by _____. My experience cost me \$75,000."

Mr. B. Says—"I was going to write you, but arranged for plans with _____ at less than your charges. I am sorry I did; I see my mistake."

MORAL—Don't have these regrets.

Buy your plans. You'll get value received.

**Wilder & Davis, Room 1503, 315 Dearborn Street
CHICAGO**

CHICAGO COLD STORAGE LAWS.

Chicago's health commissioner has completed his plan for the "reform" of the cold storage business in Chicago, and incidentally for the extinction of the poultry trade. He has prepared ordinances for submission to the city council which it is reported will be favorably received. Concerning these the health department bulletin says: "The vital provision of the proposed measure is that forbidding the sale of any slaughtered poultry, fish, game or any animal used for food purposes, refrigerated or otherwise, 'which has not been properly drawn and prepared by removing the entrails at the time of slaughter.' Other provisions of the ordinance require cold storage warehouses to be in sanitary condition; regular inspections to guarantee this."

Up to this time a small town up New York State, the home of the originator of the undrawn poultry bugaboo, shares with Kalama-zoo, Mich., the distinction of being practically the only place where such a prohibition is in force. The theorist who is its chief promoter had a bill in the New York Legislature last winter to apply to the entire State. It was killed after a committee hearing at which the fallacy of the theory was exposed. The same man has secured the re-introduction of the same measure at the present session of the New York assembly, and a public hearing is set for some time next month. It is hardly likely that the bill will pass. Practical business men realize the effect it would have on both the cold storage business and the poultry trade, and they can bring plenty of evidence to disprove the hygienic arguments of the faddists.

CHICAGO STOCK YARDS PROFITS.

The combined annual financial report of the Chicago Junction Railways and Union Stock Yards Company shows a thriving state of affairs with the companies. The net earnings for 1905 were over two million dollars. Even the horse department, established only a few years ago, increased its earnings over \$35,000 last year. The fiscal report for 1905, as compared with the preceding year, is:

	1905.	1904.
Gross earnings	\$5,539,098	\$4,944,635
Op. exp. & taxes.....	3,497,308	2,995,922
Net earnings	\$2,041,790	\$1,948,713
The income and expenditure account is as follows:		
Receipts—	1905.	1904.
Divs. rec'd from sub. cos., etc.	\$1,855,795	\$1,849,597
Deductions—		
Gen. expenses	872,975	\$62,603
Int. on bonds.....	660,000	660,000
Disc't on bonds.....	5,000	5,000
Total expenses	\$737,975	\$727,603
Balance	\$1,110,820	\$1,121,994
Dividends—		
Pfd stock	\$390,000	\$390,000
Com. stock	520,000	520,000
Total div'ds.....	\$910,000	\$910,000
Surplus	\$207,820	\$211,994
Prev. surplus	893,679	681,685
Total surplus	\$1,101,490	\$896,679

PROVISION EXPORTS FOR JANUARY.

Following are official government figures showing the exports of provisions and also of cattle, hogs and sheep for January, 1906, as compared with January, 1905, and for the seven months of the fiscal year as compared with the same period a year ago:

Cattle.—January, 1905, 40,299 head, value \$3,723,569; January, 1906, 37,337 head, value \$3,428,348. For seven months ending January, 1905, 295,978 head, value \$22,126,612; same period, 1906, 294,167 head, value \$22,109,917.

Hogs.—January, 1905, 285 head, value \$3,836; January, 1906, 2,680 head, value \$35,479. For seven months ending January, 1905, 1,798 head, value \$23,302; same period, 1906, 11,910 head, value \$128,761.

Sheep.—January, 1905, 24,646 head, value \$177,763; January, 1906, 4,113 head, value \$16,565. For seven months ending January, 1905, 146,374 head, value \$917,806; same period, 1906, 55,076 head, value \$237,552.

Canned Beef.—January, 1905, 6,133,246 lbs., value \$591,950; January, 1906, 8,040,894 lbs., value \$756,532. For seven months ending January, 1905, 34,063,173 lbs., value \$3,442,330; same period, 1906, 42,636,693 lbs., value \$4,431,005.

Fresh Beef.—January, 1905, 18,908,452 lbs., value \$1,703,443; January, 1906, 25,157,906 lbs., value \$2,273,505. For seven months ending January, 1905, 129,260,500 lbs., value \$12,191,558; same period, 1906, 153,413,270 lbs., value \$13,872,519.

Salted, Pickled and Other Cured Beef.—January, 1905, 5,263,474 lbs., value \$303,702; January, 1906, 9,383,478 lbs., value \$591,132. For seven months ending January, 1905, 31,125,878 lbs., value \$1,664,381; same period, 1906, 52,028,994 lbs., value \$3,022,915.

Tallow.—January, 1905, 3,983,941 lbs., value \$194,014; January, 1906, 10,986,239 lbs., value \$526,172. For seven months ending January, 1905, 35,159,722 lbs., value \$1,685,832; same period, 1906, 60,146,563 lbs., value \$2,877,676.

Bacon.—January, 1905, 26,653,312 lbs., value \$2,548,808; January, 1906, 40,916,203 lbs., value \$4,022,938. For seven months ending January, 1905, 144,116,772 lbs., value \$14,479,341; same period, 1906, 197,657,324 lbs., value \$19,013,928.

Hams.—January, 1905, 15,057,236 lbs., value \$1,572,730; January, 1906, 17,308,915 lbs., value \$1,730,146. For seven months ending January, 1905, 108,042,267 lbs., value \$11,759,959; same period, 1906, 114,686,568 lbs., value \$11,736,172.

Fresh, Salted or Pickled Pork.—January, 1905, 13,404,586 lbs., value \$1,025,300; January, 1906, 17,370,967 lbs., value \$1,430,319. For seven months ending January, 1905, 66,359,175 lbs., value \$5,305,241; same period, 1906, 85,382,623 lbs., value \$7,080,617.

Lard.—January, 1905, 52,847,650 lbs., value \$3,940,886; January, 1906, 84,445,766 lbs., value \$6,844,050. For seven months ending January, 1905, 329,425,654 lbs., value \$25,569,296; same period, 1906, 447,199,535 lbs., value \$35,677,827.

Oleo Oil.—January, 1905, 13,517,404 lbs., value \$1,031,526; January, 1906, 13,769,514 lbs., value \$1,217,384. For seven months ending January, 1905, 78,139,983 lbs., value \$6,158,658; same period, 1906, 115,574,623 lbs., value \$9,497,557.

Oleomargarine.—January, 1905, 679,910 lbs., value \$61,206; January, 1906, 712,759 lbs., value \$63,748. For seven months ending January, 1905, 4,373,640 lbs., value \$400,366; same period, 1906, 6,369,894 lbs., value \$549,851.

Butter.—January, 1905, 357,237 lbs., value \$68,549; January, 1906, 5,212,510 lbs., value \$1,014,907. For seven months ending January, 1905, 7,460,401 lbs., value \$1,135,549; same period, 1906, 18,534,194 lbs., value \$3,323,266.

Total Provisions.—January, 1905, value \$13,170,049; January, 1906, value \$20,551,215. For seven months ending January, 1905, value \$84,483,287; same period, 1906, value \$111,576,965.

NEW YORK.
Everything in Pure Food Preservatives, Colors, Binders and Coagulants.

Laboratory and Main Office:
212-222 Wayman St., CHICAGO

CHICAGO.
HARRY HELLER
Pres't and Gen'l Manager

SAN FRANCISCO.
97-101 Warren Street,
NEW YORK

HELLER CHEMICAL CO.

No trouble to answer questions in any language.

CHICAGO MARKET PRICES

WHOLESALE FRESH MEATS.

Carcass Beef.

Western Cows	5
Native Cows	5 1/2 @ 5 1/2
Western Steers	6 1/2 @ 6 1/2
Good Native Steers	7 1/2 @ 8
Native Steers, Medium	7 @ 7 1/2
Heifers, Good	6 1/2 @ 6 1/2
Heifers, Medium	5 1/2 @ 5 1/2
Hind Quarters	1 1/2 c. over Straight Beef
Fore Quarters	1 c. under Straight Beef

Beef Cuts.

Steer Chucks	5 1/2 @ 5 1/2
Cow Chucks	3 @ 3 1/2
Boneless Chucks	3 1/2 @ 4
Medium Plates	2 1/2
Steer Plates	3 1/2 @ 4
Cow Rounds	4 1/2 @ 5
Steer Rounds	6 1/2 @ 7
Cow Loins, Common	6 @ 7
Cow Loins, Medium	7 1/2 @ 8
Cow Loins, Good	8 @ 9
Steer Loins, Light	10 @ 10 1/2
Steer Loins, Heavy	14 1/2 @ 15
Beef Tenderloins, No. 1	16 @ 17
Beef Tenderloins, No. 2	12 1/2 @ 13
Strip Loins	6 @ 6 1/2
Sirloin Butts	6 @ 6 1/2
Shoulder Clods	5 1/2
Rolls	9 @ 9 1/2
Rump Butts	4 1/2 @ 5
Trimmings	3 @ 3 1/2
Shank	3 @ 3 1/2
Cow Ribs, Heavy	7 1/2 @ 8
Cow Ribs, Common, Light	5 1/2 @ 6
Steer Ribs, Light	6 @ 10
Steer Ribs, Heavy	11 1/2 @ 12
Loin Ends, steer—native	9 @ 9 1/2
Loin Ends, cow	6 @ 6
Hanging Tenderloins	4 1/2
Flank Steak	6 @ 6 1/2

Beef Offal.

Livers	3 1/2
Hearts	2 1/2
Tongues	1 1/2
Sweetbreads	1 1/2
Ox Tail, per lb.	4 1/2
Fresh Tripe—plain	2 1/2
Fresh Tripe, H. C.	4
Kidneys, each	4
Brains	4

Veal.

Heavy Carcass Veal	6 1/2 @ 7
Light Carcass	7 @ 8
Medium Carcass	8 @ 8
Good Carcass	10 1/2 @ 11
Medium Saddles	10 1/2 @ 10 1/2
Good Saddles	11 @ 12
Medium Racks	6 @ 6 1/2
Good Racks	8 @ 9

Veal Offal.

Brains, each	1 1/2
Sweetbreads	60
Plucks	30 @ 35
Heads, each	10

Lamb.

Medium Caul	9 1/2
Good Caul	10 @ 10 1/2
Round Dressed Lamb	11 1/2 @ 12
Saddles Caul	12
R. D. Lamb Saddles	13 1/2
Caul Lam Racks	9
R. D. Lamb Racks	9 1/2
Lamb Fries, per pair	12
Lamb Tongues, each	3
Lamb Kidneys, each	1 1/2

Mutton.

Medium Sheep	8 1/2 @ 9
Good Sheep	9 1/2 @ 10
Medium Saddles	10 1/2
Good Saddles	11
Medium Racks	6 1/2
Good Racks	8 @ 8 1/2
Mutton Legs	10 @ 10 1/2
Mutton Stew	4 1/2 @ 5
Mutton Loin	10 @ 11
Sheep Tongues, each	3
Sheep Heads, each	5

Fresh Pork, Etc.

Dressed Hogs	7 1/2 @ 8 1/2
Pork Loins	9 1/2
Leaf Lard	7 1/2
Tenderloins	10 @ 10 1/2
Spare Ribs	7
Butts	8 1/2
Hocks	5
Trimmings	5 1/2
Tails	3 1/2
Snouts	3
Pigs' Feet	3
Pigs' Heards	3 1/2
Blade Bones	4 1/2
Cheek Meat	3
Hog Plucks	3 @ 3 1/2
Neck Bones	1 1/2
Skinned Shoulders	7 1/2
Pork Heards	2
Pork Kidneys	3
Pork Tongues	10
Slip Bones	3 1/2
Tail Bones	3 1/2
Brains	4
Backfat	7 @ 7 1/2
Hams	9 @ 10
Calas	7 @ 7 1/2
Bellies	8 1/2 @ 10
Shoulders	6 @ 6

SAUSAGE.

Cloth Bologna.

Beef bungs, per piece	5
Hog casings, as packed	25
Hog casings, free of salt	50
Hog middles, per set	12
Hog bungs, export	15
Hog bungs, large mediums	8
Hog bungs, prime	5
Hog bungs, narrow	24
Imported wide sheep casings	50
Imported medium wide sheep casings	50
Imported medium sheep casings	50
Imported narrow sheep casings	50
Beef weasands	5
Beef bladders, medium	17
Beef bladders, small, per dozen	17
Hog stomachs, per piece	4

FERTILIZERS.

Dried blood, per unit	2.70
Hoof meal, per unit	2.55
Concent. tankage, 15% per unit	2.90
Ground tankage, 12%	10c
Ground tankage, 11% per unit	2.45
Ground tankage, 10% per unit	2.35
Ground tankage, 9 and 20%	2.30
Ground tankage, 6 and 35% ton	18.00
Ground steam bone, per ton	25.00
Ground steam bone, per ton	18.00
Ground tankage, per ton less than ground	50c.

HORNS, HOOFs AND BONES.

Horns, No. 1, 65@70 lbs. average	275.00
Hoofs, black, per ton	25.
Hoofs, striped, per ton	30.00
Hoofs, white, per ton	30.00
Flat skin bones, 38 to 47 lbs. ave. ton	45.00
Round skin bones, 38 to 40 lbs. ave. ton	52.00
Round skin bones, 50 to 52 lbs. ave. ton	57.50
Round thigh bones, 90 to 95 lbs. ave. ton	50.00
Jaws, skulls and knuckles, per ton	30.00

LARDS.

Prime steam, cash	7.55
Prime steam, loose	7.02 1/2
Neutral	8.75 @ 8.87 1/2
Compound	5 1/2
Leaf	7 1/2

STEARINES.

Prime oleo	7.5
Oleo, No. 2	7 @ 7 1/2
Mutton	7 @ 7 1/2
Tallow	5 1/2 @ 5 1/2
Grease	4 1/2 @ 4 1/2

OILS.

Lard oil, extra winter strained, tierces	60
Extra No. 1 lard oil	44
No. 1 lard oil	35
No. 2 lard oil	32
Oleo oil, extra	10 @ 10 1/2
Oleo oil, No. 2	9 @ 9 1/2
Oleo stock	8 @ 8 1/2
Neatsfoot oil, pure, tierces	55 @ 55
Acidless tallow oil, tierces	53 @ 53

TALLows.

Edible	6 @ 6 1/2
Prime City	5 @ 5 1/2
Choice country	5 @ 5
Packers' prime	5 @ 5 1/2
Packers' No. 1	4 @ 4 1/2
Renderers' No. 1	4 @ 4

GREASES.

White, choice	5 @ 6 1/2
White, "A"	5 @ 5 1/2
White, "B"	5 @ 5 1/2
Bone	4 1/2 @ 4 1/2
House	4 1/2 @ 4 1/2
Yellow	4 1/2 @ 4 1/2
Brown	3 1/2 @ 4 1/2
Ghee stock	3 1/2 @ 4 1/2
Neatsfoot stock	3 1/2 @ 4 1/2
Garbage Grease	3 1/2 @ 3 1/2

COTTONSEED OILS.

P. S. Y., loose	20
P. S. Y., soap grade	20 @ 29
Soap bbls., concen., 63@65% F. A.	24
Soap stock, bbls., reg. 50% F. A.	24

COOPERAGE.

Tierces	1.25 @ 2.72
Barrels, ash	.85 @ 1.87 1/2
Barrels, oak	.92 1/2 @ .95

CURING MATERIALS.

Refined saltpetre	4 1/2 @ 5 1/2
Borax acid, crystal to powdered	10 @ 11
Borax	7 1/2 @ 8
Sugar—	
White, clarified	3 1/2 @ 3 1/2
Plantation, granulated	3 1/2 @ 4 1/2
Yellow, clarified	3 1/2 @ 4 1/2
Salt—	
Ashton, in bags, 224 lbs.	20.00
Eng. packing, in bags, 224 lbs.	1.45
Michigan, medium, car lots, per ton	2.25
Michigan, granulated, car lots, per ton	2.00
Casing salt, bbls., 280 lbs., 2x@3x	1.35

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Dealers

Office, Postal Telegraph Building

W. W. house, Union Stock Yards

Chicago

TALLOW GREASE

LARD OIL NEATSFOOT OIL TALLOW OIL

CRACKLINGS BONES BONE MEAL

GLUESTOCK FERTILIZERS HOOFS AND HORNS

If you wish to sell, write us.

February 17, 1906.

NEW YORK MARKET PRICES

LIVE CATTLE.

Good to choice native steers.....	\$5.25@6.00
Medium to fair native steers.....	4.50@5.15
Poor to ordinary native steers.....	4.00@4.40
Oxen and stags.....	2.35@5.00
Bulls and dry cows.....	2.00@4.30
Good to choice native steers one year ago.....	5.30@6.25

LIVE CALVES.

Live veal calves, prime, per 100 lbs.....	39.50@97.75
Live veal calves, fair to good, per 100 lbs.....	8.25@9.25
Live veal calves, com. to med., per 100 lbs.....	5.00@8.00
Live veal calves, small, per 100 lbs.....	4.00@4.50
Live veal calves, buttermilk, per 100 lbs.....	—@—
Live veal calves, grassers, per 100 lbs.....	—@—

LIVE SHEEP AND LAMBS.

Live lambs, choice to good, per 100 lbs.....	\$7.25@7.70
Live lambs, com. to fair, per 100 lbs.....	6.25@7.00
Live sheep, culs, per 100 lbs.....	5.00@6.00
Live sheep, culs, per 100 lbs.....	3.00@3.75

LIVE HOGS.

Hogs, heavy weights (per 100 lbs.).....	\$6.65@6.70
Hogs, medium.....	6.60@6.70
Hogs, 140 lbs.....	6.70@6.80
Pigs.....	6.00@7.20
Roughs.....	5.70@5.90

DRESSED BEEF.

Choice native, heavy.....	6 1/2@7 1/2
Choice native, light.....	6 1/2@7 1/2
Common to fair, native.....	6 1/2@7 1/2

WESTERN DRESSED BEEF.

Choice native, heavy.....	6 1/2@7 1/2
Choice native, light.....	7 1/2@8 1/2
Native, com. to fair.....	7 1/2@8 1/2
Choice Western, heavy.....	7 1/2@8 1/2
Choice Western, light.....	7 1/2@8 1/2
Common to fair Texas.....	6 1/2@7 1/2
Good to choice肥牛.....	6 1/2@7 1/2
Common to fair肥牛.....	5 1/2@6 1/2
Choice cows.....	6 1/2@7 1/2
Common to fair cows.....	6 1/2@7 1/2
Good to choice oxen and stags.....	6 1/2@7 1/2
Common to fair oxen and stags.....	6 1/2@7 1/2
Fleshy bologna buls.....	5 1/2@5 1/2
Fresh pork loins, Western.....	10 1/2@11 1/2

BEEF CUTS.

Ribs, No. 1, 10c.; No. 2, 8c.; No. 3, 6 1/2c.; Loins, No. 1, 12 1/2c.; No. 2, 11@11 1/2c.; No. 3, 9@10c.	
Chucks, No. 1, 6c.; No. 2, 4 1/2c.; No. 3, 4c. Rounds, No. 1, 7c.; No. 2, 6c.; No. 3, 5 1/2c.	

DRESSED CALVES.

Veals, city dressed, prime, per lb.....	14 @14 1/2
Veals, good to choice, per lb.....	12 @13 1/2
Calves, country dressed, prime, per lb.....	12 @13 1/2
Calves, country dressed, fair to good.....	12 @12 1/2
Calves, country dressed, common.....	11 @11 1/2

DRESSED HOGS.

Pigs.....	9 @ 9 1/2
Hogs, heavy.....	9 @ 9 1/2
Hogs, 150 lbs.....	7 1/2@8
Hogs, 100 lbs.....	8 1/2@8 1/2
Hogs, 140 lbs.....	8 1/2@8 1/2

DRESSED SHEEP AND LAMBS.

Spring lambs, choice, per lb.....	11 1/2@12 1/2
Spring lambs, good.....	10 @11 1/2
Spring lambs, culs.....	9 @ 9 1/2
Sheep, choice.....	9 @ 9 1/2
Sheep, medium to good.....	9 @ 8 1/2
Sheep, culs.....	8 @ 8 1/2

PROVISIONS.

(Jobbing Trade.)	
Smoked hams, 10 lbs, average.....	12 @12 1/2
Smoked hams, 12 to 14 lbs, average.....	11 1/2@12
Smoked hams, heavy.....	11 1/2@12
California hams, smoked, light.....	8 1/2@8 1/2
California hams, smoked, heavy.....	8 1/2@8 1/2
Smoked shoulders.....	8 1/2@9 1/2
Smoked bacon, boneless.....	12 @12 1/2
Smoked bacon (rib in).....	11 1/2@12
Dried beef strips.....	13 @13 1/2
Smoked beef tongue, per lb.....	17 @17
Pickled bellies, heavy.....	9 1/2@10

BONES, HOOFS AND HORNS.

Round shin bones, av. 50@60 lbs, cut.....	—@\$100.00
Flat shin bones, av. 40@45 lbs, cut, per	
100 bones, per 2,000 lbs.....	42.00@45.00
Hoofs, per ton.....	—@30.00
Thigh bones, av. 80@85 lbs, cut, per	
100 bones, per 2,000 lbs.....	—@30.00
Horns, 7 1/2 oz. and over, steer, first	
quality, per ton.....	—@300.00

BUTCHERS' SUNDRIES.

Fresh steer tongues.....	75@80c. a piece
Fresh cow tongues.....	50@60c. a piece
Calves' head, scalded.....	20@40c. a piece
Sweetbreads, veal.....	25@27c. a pair
Sweetbreads, beef.....	14@22c. a pound
Calves' livers.....	25@30c. a piece
Beef kidneys.....	7@10c. a piece
Mutton kidneys.....	1 1/2@2c. a piece
Livers, beef.....	—@4c. a pound

THE NATIONAL PROVISIONER.

LIVE CATTLE.

Oxtails.....	40@10c. a piece
Hearts, beef.....	40@10c. a piece
Rolls, beef.....	10@12c. a pound
Tenderloin beef, Western.....	12@22c. a pound
Lamb's fries.....	40@10c. a pair
Fresh pork, loins, city.....	—@—
Fresh pork, loins, Western.....	10

BUTCHERS' FAT.

Ordinary shop fat.....	—@—
Suet, fresh and heavy.....	—@—
Shop bones, per cwt.....	—@—

SAUSAGE CASINGS.

Sheep, imp., wide, per bundle.....	50
Sheep, imp., wide, per kg, 50 bundles.....	540.00
Sheep, imp., medium, per bundle.....	50

Sheep, imp., narrow.....	44
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Hog, American, free of salt, in tiers or	
bbis, per lb., f. o. b.	50

Hog, American, kegs, per lb., f. o. b. Chicago.....	50
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Beef, rounds, per set, f. o. b. New York.....	14
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Beef, rounds, per lb.....	8
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Beef, bungs, piece, f. o. b. New York.....	6 1/2
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Beef, bungs, per lb.....	5
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Beef, middles, per set, f. o. b. Chicago.....	40
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Beef, middles, per set, f. o. b. New York.....	42
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Beef, middles, per lb.....	6 1/2
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Beef weasands, per 1,000, No. 1s.....	—@—
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Beef weasands, per 1,000, No. 2s.....	2 1/2@3 1/2
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SPICES.

Whole. Ground.

Pepper, Sing., white.....	17 1/2@18
Pepper, Sing., black.....	12 1/2@14
Pepper, Penang, white.....	16 1/2@18
Pepper, red, Zanzibar.....	14@17
Pepper, shot.....	14@—

Allspice.....	7@8
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Coriander.....	10@12
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Cloves.....	16@18
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Cardamom.....	11@12
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Branded skins.....	11@12
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Branded kips.....	140
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Heavy branded kips.....	165
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Ticky skins.....	11
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Heavy ticky kips.....	170

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RECEIPTS AT CENTERS

SATURDAY, FEBRUARY 10, 1906.

	Cattle.	Hogs.	Sheep.
Chicago	400	21,000	2,000
Kansas City	500	4,000	500
Omaha	100	5,500	1,000

MONDAY, FEBRUARY 12, 1906.

Chicago	26,000	52,000	35,000
Kansas City	13,000	7,000	15,000
Omaha	4,300	4,500	7,500

TUESDAY, FEBRUARY 13, 1906.

Chicago	5,000	25,000	15,000
Kansas City	14,000	16,000	8,000
Omaha	5,200	11,000	9,000

WEDNESDAY, FEBRUARY 14, 1906.

Chicago	17,000	30,000	18,000
Kansas City	8,000	10,000	5,000
Omaha	2,000	4,000	6,000

THURSDAY, FEBRUARY 15, 1906.

Chicago	6,000	23,000	12,000
Kansas City	7,000	8,000	4,000
Omaha	36,000	6,500	6,500

FRIDAY, FEBRUARY 16, 1906.

Chicago	6,500	32,000	10,000
Kansas City	3,000	7,000	8,000
Omaha	3,000	11,000	4,200

STOCKMEN TO MOVE ON WASHINGTON.

In pursuance of the decision of the American National Live Stock Association at its recent convention, the committee appointed to do missionary work at Washington in the interest of the livestock and meat industries are preparing to move on the capital. They will be in Washington on Tuesday, headed by president Murdo Mackenzie, prepared to urge legislation favoring export meat interests, larger appropriations for meat inspection and other work of the Bureau of Animal Industry, a rational pure food law, amendment of the stock shipping law, and other measures. A committee is also conferring in Kansas City to-day with Missouri River livestock exchanges, relative to the proposed increase in commissions.

ILLICIT HORSE HIDE TRADE.

The horse hide business came to a sudden termination in Lassen county, California, when Sheriff Wilson swooped down on a camp on Rush Creek, near the Nevada state line, and captured one of the party in whose possession were fifty-seven horse hides, baled and tagged, ready for shipment.

For the past two years one Mathews has been buying and shipping hides to Reno, Nev. Thousands of wild horses run on the hills of Lassen county, California, and Washoe county, Nevada, that are not owned by any one. They are termed by the stockmen "long ears," and are a mongrel stock too small for use, and would not bring over ten dollars in the market. The stockmen considered that the sooner the range was rid of them the better it would be for their own stock and did not object to them being shot.

But a few days ago a rancher came across the carcass of one of his favorite work horses, minus its hide, and then he communicated with the sheriff, and together they went to Mathews' headquarters on Rush Creek. Mathews and one of his men fled, but another named Dugan was arrested and is now in jail. Dugan has made a confession and says that he and another man were paid wages by the month by Mathews to slaughter horses for their hides.

Watch page 48 for machinery bargains.

GENERAL MARKETS

LARD IN NEW YORK.

Western steam, \$7.75@7.85; city steam, \$7.50; refined, Continent, tcs., \$8.20; do., South Africa, tcs., \$8.65; do., kegs, \$9.65; compound, \$6@6.12½.

HOG RECEIPTS, FEB. 16.

CHICAGO.—Receipts, 32,000; 10@15c. lower; \$5.85@6.12½.

KANSAS CITY.—Receipts, 7,000; 10c. lower; \$5.85@6.02½.

OMAHA.—Receipts, 10,500; slow; 10c. lower; \$5.75@5.90.

ST. LOUIS.—Lower; \$5.20@6.10.

INDIANAPOLIS.—Receipts, 7,000; lower; \$6@6.25.

EAST BUFFALO.—Receipts, 3,400; steady to slow; \$6.45@6.50.

CLEVELAND.—Receipts, 20 cars; fairly active; lower; \$6.30.

LIVERPOOL.

(By Cable to The National Provisioner.)

Liverpool, Feb. 16.—Beef, extra India mess, tierces, 78s. 9d.; pork, prime mess, Western, 67s. 6d.; shoulders, 40s.; hams, short, clear, 48s.; bacon, Cumberland cut, 48s. 6d.; do., short rib, 48s.; do., long clear, 30@35 lbs., 47s.; do., 35@40 lbs., 46s. 6d.; backs, 44s. 6d.; bellies, 48s. Tallow, 25s. Turpentine, 49s. 6d. Rosin, common, 10s. 1½d. Lard, spot, prime Western, 40s.; do., American refined, 20-lb. pails, 40s. 9d. Cheese, white new, 61s.; do., colored, 63s. American steam lard (Hamburg), 50 kilos, 38½ marks. Tallow, Australian (London), 20s. Cottonseed oil, refined (Hull), 19s. 1½d. Refined petroleum (London), 6½d.; linseed (London), 44s.; linseed oil (London), 20s. 7½d.

OLEO AND NEUTRAL LARD.

During the past week the oleo market has been quite active at the decline and it looks now as though we were at or near the bottom. Stocks are still quite heavy both here and abroad, but the demand promises to absorb all that is offered.

Neutral lard has been very quiet during the past week and prices, in spite of the smaller arrivals of hogs, have been at constantly lower figures.

Cottonseed oil is very quiet and prices a little easier on account of the lack of demand. Europe will not pay prices ruling here and is keeping out of the market until prices decline considerably from their present level.

FRIDAY'S CLOSINGS.

Provisions.

The hog receipts at the packing points were at 10@15c. lower prices, and the estimates of next week's arrivals are of a more important volume. The products markets are, therefore, lower for the day, while they are likely to be weaker before they are higher if the hog marketing continues to be favored by cold weather. The shipments of the products out of Chicago are now falling off materially, and which will permit a more important addition to stocks.

Cottonseed Oil.

Crude at the mills is not urgently offered; meanwhile it is accumulating in supply as demands are moderate, and it is a possible disadvantageous feature under the near prospects of dull export and compound makers'

demands. Crude has 24c. bid, and occasionally 24½c. for small lots. New York "call" prices for prime yellow are a trifle easier. February at 30½@31½c.; March at 30¾@31½c.; May at 31¼@31½c.; July at 31¼@32½c.; September at 32½@33c. After "call" still lower; pressure to sell; sales 700 bbls. March, 30¾@31c.; 1,400 bbls. May, 31@31½c.; 100 bbls. July 32c.; 3,700 bbls. July 31½c.

Tallow.

Market quiet and unchanged.

Oleo Stearine.

Quiet; steady; New York, 7¾c.; Chicago, 7½c.

BALTIMORE FERTILIZER MARKET.

(Special Letter to The National Provisioner from Thomas H. White & Co.)

Baltimore, Md., Feb. 15.—The ammoniate market the past week has been fairly active. Producers are claiming heavy inquiry for materials, and their views are firm, although the following quotations are to a great extent nominal. We quote:

Unground tankage, 9 and 20, \$2.32½ and 10, \$2.35 and 10 per unit f. o. b. Chicago; ground tankage, 10 and 20, \$2.40 and 10, \$2.45 and 10 per unit f. o. b. Chicago; ground tankage, 11 and 15, \$2.47½ and 10, \$2.50 and 10 per unit f. o. b. Chicago; ground concentrated tankage, \$2.32½@2.35 per unit f. o. b. Chicago; ground blood, \$2.67½@2.70 per unit f. o. b. Chicago; hoof meal, \$2.47½@2.50 per unit f. o. b. Chicago.

Nitrate of Soda.—The market for spot and near futures is firm. We quote: Spot, \$2.20 per 100 lbs.; March-June, \$2.22½ per 100 lbs.; July-August, \$2.20 per 100 lbs.; July-December, \$2.17½ per 100 lbs.; entire year, 1907, \$2.12½ per 100 lbs.; entire year, 1908, \$2.05 per 100 lbs.

STIMULATES USE OF FERTILIZERS.

Nearly all of the best arable land of the country has now been taken up, and those who are most vitally concerned with soil production realize that henceforth the main problem for the man who intends to make cultivation of the soil his occupation will be not so much a question of greater acreage as of greater production from a given acre. This is exactly the condition as it exists to-day, and is rightly manifested by the ever increasing use of fertilizers, for the ultimate benefit of the soil tiller himself, for the simple reason, if not for many other equally important considerations, that the use of fertilizers permits a harvest of increased yields from a smaller surface of soil, with attending economy in the working of just so much soil, and decreased investment of labor. If America hopes to continue her phenomenal development, she must be able to produce not only the enormous quantities of food required for her own increasing industrial population, but a large share of the food for other nations as well.



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RETAIL SECTION



POULTRY BILL HEARING PUT OFF.

Butchers, poultry dealers and others who are interested in the attempt being made again this year to prohibit the sale or storage of undrawn poultry in the state of New York will attend the public hearing to be given on the bill before an assembly committee at Albany on March 1. This hearing had been set for this week, but was postponed to the later date to enable both sides to gather their forces. The bill prohibits the sale of dressed poultry anywhere in the state unless it has been drawn within 48 hours of slaughter. It also prohibits the storage of undrawn poultry, and if it became a law would practically wipe out the storage industry, as well as making poultry an almost impossible luxury for consumers most of the year. Butchers are cooperating with poultry and warehousemen in fighting the bill, the chief supporters of which are the "pure food cranks."

SUDDEN DEATH OF A BIG BUTCHER.

James D. Miller, one of the most prominent retail meat dealers of Denver, Colo., and one of the promoters of the Western Live Stock Show, died suddenly at his home in that city the day after the show closed from heart failure due to overexertion at the show auction, where he took a prominent part in bidding up fat stock offered for sale there. Mr. Miller, who was 48 years of age, went to Denver 20 years ago from London, England, and began with a small shop. At the time of his death he was probably the largest retailer in the city.

ANOTHER LIBEL.

Grocer—What are you taking Willie out of school for?

Butcher—Well, you see I intend to bring him up in the butcher business, and his teacher has been telling him that sixteen ounces make a pound!

CLEVELAND BUTCHER'S DIVIDEND.

At their recent annual meeting the Retail Butchers' Protective Association of Cleveland, O., declared a 6 per cent. dividend to stockholders in the association. The following directors were elected for the ensuing year: James Tuck, Thomas Bradley, Dan S. Kuser, A. S. Pickering, O. L. Mason, Sam Mason, W. Pickering, R. C. Fluekiger, W. J. Lees, W. Whitmore, W. J. Cobblewick, W. Hawkeswell, T. R. Saywell, A. A. Wagner and Sam Myers.

MUNICIPAL ABATTOIR IN GEORGIA.

City authorities of Augusta, Ga., are seriously considering the establishment of a municipal abattoir, where they would compel all local slaughterers to kill their stock. It is claimed that local killing in that city is conducted under circumstances that are not healthful or proper and that it is difficult for the city inspectors to stop abuses. Therefore they desire to get the local slaughterers all together in one place where they can watch them.

UTAH BUTCHERS ORGANIZE.

The Retail Butchers' Association of Provo, Utah, has been organized with the following officers: T. C. Thompson, president; John T. Taylor, vice-president; Albert S. Jones, secretary; C. A. Pederson, treasurer; J. E. Cheever, sergeant-at-arms; J. H. Frisby, John Saxe, Fred Kimber, Ralph Poulton and Phil Speckart, directors.

BALTIMORE BUTCHERS ELECT.

The United Master Butchers' Association of Baltimore, Md., has elected Andrew W. Schmidt president and Edwin Pairo secretary. A large membership is reported in this organization.

Dispose of your old equipment at a good price through the "For Sale" department on page 48.

LOCAL AND PERSONAL.

Charles Daly has opened a butcher shop at Oswego, N. Y.

John Pettys has opened a new meat market at St. Johns, Ore.

D. Allen has engaged in the meat business at Cimarron, Kan.

William Shirley will open a new meat market at Milltown, N. B.

Gordon & Lozar have opened a new meat market at Stafford, Kan.

Fire damaged the butcher shop of Frank Mikich at Pittsburg, Pa.

McCasky & Durham will open a new meat market at Leiperville, Pa.

Tholstop Bros. have opened a new butcher shop at Bay View, Wash.

D. E. Furry & Sons have opened a new meat market at Altoona, Pa.

D. L. Lamaster is about to engage in the meat business at Clarkston, Wash.

Moeller Bros. have sold out their meat market at Denison, Ia., to Davis Bros.

The Dalles Dressed Meat Company, of The Dalles, Ore., has been incorporated.

The butcher shop of Matthew Runkle, at Dundee, Ind., was destroyed by fire.

F. Minor has succeeded to the meat business of Ferry & Benson at Greeley, Neb.

Samuel Reed has sold his meat market at Mishawaka, Ind., to Fred Zimmerman.

P. H. Mitchell has sold out his meat business at Weldon, Ia., to Tallman & Parr.

F. A. Sauer has purchased the meat business of Miller & Frye, at Chanute, Kan.

Sherman Bros. have sold out their butcher shop at Waldron, Kan., to Haskins Bros.

J. C. McDaniel has sold out his meat business at Mooreland, Okla., to D. B. Strait.

Ostling & Hedman have purchased the meat business of Henn Bros., at Aspen, Colo.

Walker & Lauderdale have engaged in the grocery and meat business at Cassville, Mo.

W. O. Butler has purchased the meat business of Chapman & Son at Royse City, Tex.

L. Cavish has purchased the meat business of McAnich Bros. & Burke, at Tonkawa, Okla.

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of the
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WARRANTED
DETROIT

Joseph Francis has opened a meat, provision and grocery store at Gloucester, Mass.

Gebert & Co. have succeeded to the meat business of George Gebert, at Ritzville, Wash.

W. L. Iliff has succeeded to the meat business of Iliff & Clayton at Medicine Lodge, Kan.

Wm. McDonald has disposed of his meat business at Canon City, Colo., to Woodring & Maher.

T. A. Thomas has sold out his grocery and meat business at Latham, Kan., to J. W. Shindheim.

H. T. Murray has been succeeded in the meat business at Orangeville, Ida., by J. B. Thompson.

Cooper & Ellison have been succeeded in the meat business at Paris, Tex., by Ellison & Grimes.

Fire at Sodus Point, N. Y., destroyed the grocery and meat market of Gordon & Clarence Doville.

Marsh & Mead have purchased the grocery and meat business of J. J. O'Rourke, at Prague, Okla.

William Freund has purchased a third interest in the firm of Freund Bros., at Benton Harbor, Mich.

Mr. Young has sold his interest in the meat business of Hurst & Young, at Sanger, Tex., to T. J. Brooks.

Henry G. Kriebel, who bought the butcher business of J. Gesingers, at Alburts, Pa., will take possession on March 10.

Harry Graham has admitted a partner in his meat business at Boise City, Ida., and the firm is now Graham & Stangel.

The Inter-State Packing and Provision Company has opened a new meat market at 725 Franklin avenue, St. Louis, Mo.

John Collett, a butcher of Bowling Green, Ky., has been declared bankrupt. His liabilities are given as \$4,920.44; assets, \$30.

Morse & Butterworth have purchased the grocery, provision and meat business of George E. Besson, at Marshfield, Mass.

L. A. Smith has been succeeded in the meat and grocery business by Smith & Wade, at Springfield, Mo.

A petition in involuntary bankruptcy has been filed against Cornelius G. Golde, of Tonawanda, N. Y. Dow Vrooman, of Tonawanda, has been named as receiver.

Mitchell-Govero has purchased a half interest in the meat and grocery business of Walter Stogeliski, at Russells, Mass. The new firm will be known as Stogeliski & Govro.

The John H. McCarthy Company has been incorporated, with \$50,000, to deal in provisions, by J. H. McCarthy, 32 North street, Boston, Mass., and Margaret E. McCanna, same address.

Jesse M. Morgan, Fred L. Morgan, of Boston, Mass., and Mattie J. Morgan, of Brookline, Mass., have incorporated the Morgan Brothers Company, with \$2,400 capital stock, to deal in provisions.

A. H. Gutkes & Meierdiercks Company, of Brooklyn, N. Y., have been incorporated to deal in fish and provisions, with \$75,000 capital stock, by August G. and Charles H. Gutkes, 90 Van Dyke street, Brooklyn; George C. Gutkes, same address; Charles Meierdiercks, 641 Prospect avenue, Bronx, and John Meierdiercks, 515 East Nineteenth street, New York.

TALKS ON LAW

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LANDLORD AND TENANT.

Holding Under an Invalid Lease, and Holding Over.

Where the lease attempted to be made is invalid, neither the landlord nor the tenant has any rights under it, and it is as if it were never written, so long as the tenant has not taken possession under it. Neither party can go into court and enforce any of its terms.

However, if the tenant has come into possession of the premises under the invalid lease, it will govern the rights of the parties in some particulars, though not in all. For instance, a verbal lease for five years would be invalid, and neither the landlord nor the tenant could enforce its terms, unless the tenant has gone into possession under it. If, however, the tenant has gone into possession under it, the terms of the lease will govern the rights and duties of the parties as to the amount of rent to be paid, the use to be made of the premises, the matter of making repairs, etc.; but the provision as to the length of the term, that is, five years, is of no effect. In such a case the tenancy becomes one from year to year.

There is a still further qualification to the general principle as laid down: If any of the provisions of the lease are inconsistent with a tenancy from year to year, such provisions will not stand. But where a written lease is executed on Sunday, and the lessee enters into possession on that day, the lease is absolutely void for all purposes, and reference cannot be had to the lease in determining the terms of the tenancy; so decided in a Wisconsin case.

A tenancy from year to year under an invalid lease, such as we have described, differs from an ordinary tenancy from year to year in this: It is the rule that where a tenancy is from year to year, the parties must give notice to quit, and the notice is almost universally fixed at six months before the end of the yearly term, unless the lease specifies otherwise; in other words, to end a tenancy from year to year that runs on indefinitely, notice must be given by one party to the other. But in the case of one holding possession under an invalid lease (which the law declares to be a tenancy from year to year notwithstanding its provisions for a stated term), the tenancy terminates at the end of the time fixed by the invalid agreement, without any notice to quit.

For instance, suppose I rent you property from year to year for an indefinite time. To terminate the tenancy, notice must be given six months before the end of one of the yearly periods. Now, suppose that I rent you property for five years under a verbal lease. A verbal lease for five years is invalid. But suppose you have taken possession under the invalid lease. The law says you are a tenant from year to year; but in this case, if you are allowed to remain for five years, it is not necessary that a notice be given six months before the end of the five years in order that the tenancy from year to year terminate then.

In one case a person who cultivated a farm on shares, made a verbal agreement, which was void under the statute, to cultivate it three years more on the shares. Even though the agreement itself was invalid for the three years, the person making it having entered upon the premises, the Court held that a tenancy from year to year was established.

When a tenant remains in possession of leased premises after the expiration of the term stated in his lease, he is said to "hold over."

Where a tenant holds over, he is bound for another term at the option of the landlord. If the tenancy was from month to month, he is held for another month. If it is from year to year, or for an indefinite period, he is held for another year.

The question of when rent is payable does

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not fix the length of term. Where the term was for a year with rent payable monthly, and the party holds on after the year has expired, he is held, not for another month, but for another year.

The right to determine whether a tenant may remain for another period in case of holding over, belongs to the landlord.

A landlord may, by quietly submitting to the holding over, be taken as agreeing, as where he knows that the tenant is holding over and accepts rent after the term has expired. Once the landlord's consent, either directly or indirectly given, has created a new term, neither landlord nor tenant can thereafter refuse to recognize it as existing. The law fixed the tenant's liability for holding over, independently of his intention.

The mere fact that the tenant holds over is not of itself sufficient to make a tenancy from year to year. The landlord must in some way recognize the tenancy, by the acceptance of rent, or otherwise. In an Illinois case it was held, that when a tenant held over in order to take possession of certain new premises of the landlord, he was only held liable for the time he occupied.

In a New York case, the parties at the time the lease expired were negotiating for occupying another portion of the premises at a different rent. The Court held that the tenant could not be held for another year, if he vacated the premises, under the circumstances, in a reasonable time after the negotiations had failed.

The course open to a landlord in the case of a tenant's holding over and neglecting or refusing to give up possession, is to bring action for ejectment and damages.

The terms of the old lease, in case of a new term by holding over, govern during the new term.

If, when the lease is about to expire, the landlord notifies a tenant that in case he retains possession after the lease expires he will be bound for a new term at increased rent, or on different conditions than what were provided in the original lease, and the tenant actually holds over, the latter is bound for the new term at the increased rent and under the changed conditions.

(To be continued.)

